VPDES PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as a minor municipal permit.

1. **PERMIT NO.**: VA0068209 **EXPIRATION DATE**: November 8, 2014

2. **FACILITY NAME AND LOCAL MAILING ADDRESS**

Chesapeake Regional Airport
2800 Airport Drive
Chesapeake, VA 23323

FACILITY LOCATION ADDRESS (IF DIFFERENT)

1777 West Road
Chesapeake, VA 23323

CONTACT AT FACILITY:
NAME: Mr. Joseph E. Love
TITLE: Airport Manager
PHONE: (757)-432-8110

CONTACT AT LOCATION ADDRESS
NAME: same
TITLE:
PHONE:

3. **OWNER CONTACT**: (TO RECEIVE PERMIT)
NAME: Mr. Joseph E. Love
TITLE: Airport Manager
COMPANY NAME: same
ADDRESS:
PHONE: ( )

CONSULTANT CONTACT:
NAME:
FIRM NAME:
ADDRESS:

PHONE: ( )

4. **PERMIT DRAFTED BY**: DEQ, Water Permits, Regional Office

Permit Writer(s): R. E. Smithson Date(s): 08/04/14
Reviewed By: D.D. Austin Date(s): 08/12/14, 8/18/14

5. **PERMIT ACTION:**

( ) Issuance (X) Reissuance ( ) Revoke & Reissue ( ) Owner Modification
( ) Board Modification ( ) Change of Ownership/Name [Effective Date:]

6. **SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS**:

Attachment 1	Site Inspection Report/Memorandum
Attachment 2	Discharge Location/Topographic Map
Attachment 3	Schematic/Plans & Specs/Site Map/Water Balance
Attachment 4	TABLE I - Discharge/Outfall Description
Attachment 5	TABLE II - Effluent Monitoring/Limitations
Attachment 6	Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding
Attachment 7	Special Conditions Rationale
Attachment 8	Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling
Attachment 9	TABLE III(a) and TABLE III(b) - Change Sheets
Attachment 10	Chronology Sheet
Attachment 11	Correspondence

APPLICATION COMPLETE: 07/11/14 (revisions received)

7. **PERMIT CHARACTERIZATION**: (Check as many as appropriate)

(X) Existing Discharge	(X) Effluent Limited
( ) Proposed Discharge	(X) Water Quality Limited
(X) Municipal	( ) WET Limit
SIC Code(s) 4581	( ) Interim Limits in Permit
( ) Industrial	( ) Interim Limits in Other Document
SIC Code(s)	(X) Compliance Schedule Required
( ) POTW	( ) Site Specific WQ Criteria
(X) PVOTW	( ) Variance to WQ Standards
( ) Private	( ) Water Effects Ratio
( ) Federal	( ) Discharge to 303(d) Listed Segment
( ) State	( ) Toxics Management Program Required
( ) Publicly-Owned Industrial	( ) Toxics Reduction Evaluation
	( ) Storm Water Management Plan
	( ) Pretreatment Program Required
	( ) Possible Interstate Effect
	( ) CBP Significant Dischargers List

8. **RECEIVING WATERS CLASSIFICATION**: River basin information.

Outfall No(s): 001

Receiving Stream:	Unnamed tributary to Twelve Foot Ditch to Northwest River
River Mile:	0.84
Basin:	Chowan and Dismal Swamp
Subbasin:	Albemarle Sound
Section:	1a
Class:	III
Special Standard(s):	none
Tidal:	NO
7-Day/10-Year Low Flow:	0 MGD
1-Day/10-Year Low Flow:	0 MGD
30-Day/5-Year Low Flow:	0 MGD
Harmonic Mean Flow:	0 MGD

Stormwater Outfalls 002, 004 and 005:

RECEIVING WATERS CLASSIFICATION: River basin information.

Outfall No(s): 002, 004

Receiving Stream:	Unnamed tributary to Twelve Foot Ditch to Northwest River
River Mile:	4.10
Basin:	Chowan and Dismal Swamp
Subbasin:	Albemarle Sound
Section:	1a
Class:	III
Special Standard(s):	none
Tidal:	NO
7-Day/10-Year Low Flow:	0 MGD
1-Day/10-Year Low Flow:	0 MGD
30-Day/5-Year Low Flow:	0 MGD
Harmonic Mean Flow:	0 MGD

Outfalls 005

Receiving Stream:	Twelve Foot Ditch to Northwest River
River Mile:	4.19
Basin:	Chowan and Dismal Swamp
Subbasin:	Albemarle Sound
Section:	1a
Class:	III
Special Standard(s):	none
Tidal:	NO
7-Day/10-Year Low Flow:	0 MGD
1-Day/10-Year Low Flow:	0 MGD
30-Day/5-Year Low Flow:	0 MGD
Harmonic Mean Flow:	0 MGD

9. FACILITY DESCRIPTION: Describe the type facility from which the discharges originate.

Existing municipal discharge resulting from the discharge of treated domestic sewage.

10. LICENSED OPERATOR REQUIREMENTS: ( ) No (X) Yes Class: Class II
BPJ: Combination of Biological & Advanced WWTP, design flow-0.010 MGD

11. RELIABILITY CLASS: I

12. SITE INSPECTION DATE: 12/11/13 REPORT DATE: 12/16/13

Performed By: Clyde Gantt

SEE ATTACHMENT 1

13. DISCHARGE(S) LOCATION DESCRIPTION: Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Name of Topo: Deep Creek/Lake Drummond SE Quads Quadrant No.: 3A & 3D
SEE ATTACHMENT 2

14. ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.

SEE ATTACHMENT 3 (CAN ALSO REFERENCE TABLE I)

15. DISCHARGE DESCRIPTION: Describe each discharge originating from this facility.

SEE TABLE I - SEE ATTACHMENT 4

16. COMBINED TOTAL FLOW:

TOTAL: 0.010 MGD (for public notice)

PROCESS FLOW: _____ MGD (IND.)

NONPROCESS/RAINFALL DEPENDENT FLOW: _____ (Est.)

DESIGN FLOW: 0.010 MGD (MUN.)

17. STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:
(Check all which are appropriate)

- X State Water Control Law
- X Clean Water Act
- X VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
- X EPA NPDES Regulation (Federal Register)
- _____ EPA Effluent Guidelines (40 CFR 133 or 400 - 471)
- X Water Quality Standards (9 VAC 25-260-5 et seq.)
- _____ Wasteload Allocation from a TMDL or River Basin Plan

18. EFFLUENT LIMITATIONS/MONITORING: Provide all limitations and monitoring requirements being placed on each outfall.

SEE TABLE II - ATTACHMENT 5

19. EFFLUENT LIMITATIONS/MONITORING RATIONALE: Attach any analyses of an outfall by individual toxic parameter. As a minimum, it will include: statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); wasteload allocation (acute, chronic and human health); effluent limitations determination; input data listing. Include all calculations used for each outfall and set of effluent limits and those used in any model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limiting internal waste streams and indicator pollutants. Attach chlorine mass balance calculations, if performed. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested variances or alternatives to required permit conditions/limitations. This includes, but is not limited to: waivers from testing requirements; variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

SUITABLE DATA: In what, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

All suitable effluent data were reviewed.

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

The receiving stream has been classified as tier 1; therefore, no further review is needed. Permit limits have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses: ATTACHMENT 6

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

There are no backsliding issues to address in this permit (i.e., limits as stringent or more stringent when compared to the previous permit).

SEE ATTACHMENT 6

20. SPECIAL CONDITIONS RATIONALE: Provide a rationale for each of the permit's special conditions.

SEE ATTACHMENT 7

21. TOXICS MONITORING/TOXICS REDUCTION AND WET LIMIT SPECIAL CONDITIONS RATIONALE: Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit.

N/A

22. SLUDGE DISPOSAL PLAN: Provide a description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

This facility utilizes pump and haul by a septage hauler for transport to the HRSD Nansemond River Plant for final disposal. This plan specifies that approximately 1000 gallons of sludge is pumped each 167 days. This plan has been included in the VPDES application for DEQ approval. The standard special condition pertaining to this plan will be included in Part I of the permit.

23. MATERIAL STORED: List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

Aviation fuels and lubricants

24. RECEIVING WATERS INFORMATION: Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260-5 et seq.). **Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied.** Attach any memoranda or other information which helped to develop permit conditions (i.e. tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

SEE ATTACHMENT 8: Tier determination, river mile designation

25 305(b)/303(d) Listed Segments: Indicate if the facility discharges to a segment that is listed on the current 303(d) list and, if so, provide all appropriate information/calculations.

The facility does not discharge to a 303(d) listed segment.

The discharge goes to an X-trib to Twelve Foot Ditch which is not an impaired segment, but is a tributary to the Northwest River. EPA approved the Northwest River watershed TMDL on 4/26/2011, SWCB approved 6/25/2012 for this segment. It contains a wasteload allocation for this discharge of total phosphorus TMDL due to low dissolved oxygen impairment (Average annual load = 34.52 kg/yr total phosphorus and maximum daily load of 0.095 kg/day). This permit contains those same limits for total phosphorus (in conformity with the TMDL) and a 4 year schedule to meet those limits.

26. CHANGES TO PERMIT: Use TABLE III(a) to record any changes from the previous permit and the rationale for those changes. Use TABLE III(b) to record any changes made to the permit during the permit processing period and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 9

27. NPDES INDUSTRIAL PERMIT RATING WORKSHEET:

N/A - This is a municipal facility.

28. DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from DEQ planning.

The discharge is **not** mentioned in an existing Board adopted WQM planning document. . The facility is assigned a total phosphorus WLA in the EPA approved NW Rv. TMDL. EPA approved the Northwest River watershed TMDL on 4/26/2011, SWCB approved 6/25/2012 for this segment. It contains a wasteload allocation for this dischage of total phosphorus TMDL due to low dissolved oxygen impairment (see Conformance Review - fact sheet page).

29. PUBLIC PARTICIPATION: Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

VDH/DSS COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the Virginia Dept. of Health and the Div. of Shellfish Sanitaiton and noted how resolved.

VDH & DSS waived their right to comment and/or object on the adequacy of the draft permit. The DSS had no comments on the application.

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA was sent a draft containing the TMDL requirements. By letter dated _____, the EPA provided the following comments:

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable.

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document any comments received from other sources and note how resolved.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation, and no comments were received.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation. The City of Chesapeake Public Utilities Dept. previously commented on another project to the NW River that they would like to see a requirement for the facility to notify them if any overflow, bypass or other incident should occur that results in a violation of any water quality parameter in the permit. The City of Chesapeake was notified that DEQ does not have the legal authority to impose such a requirement. However we will notify the permittee that such a request has been made to protect the drinking water for the citizens of Chesapeake.

PUBLIC NOTICE INFORMATION: Comment Period: Start Date
End Date

Persons may comment in writing or by e-mail to the DEQ on the proposed issuance/reissuance/modification of the permit within 30 days from the date of the first notice. Address all comments to the contact person listed below. Written or e-mail comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of the DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requestor's interests would be directly and adversely affected by the proposed permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting R. E. Smithson at: Department of Environmental Quality (DEQ), Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, VA 23462. Telephone: 757-518-2106 E-mail: robert.smithsonjr@deq.virginia.gov

Following the comment period, the Board will make a determination regarding the proposed reissuance. This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

30. ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:

The discharge is approximately 10 miles upstream from the City of Chesapeake's potable water intake on the Northwest River. No problems have been reported as a result of this discharge and VDH comments indicate that "this should be a sufficient distance to minimize the impacts of the discharge".

This facility does not conduct de-icing operations. A stormwater pollution prevention plan (SWPPP)is required. Facility-specific storm water conditions found in 9VAC25-151-260. Sector S - Air transportation were not required since there are no maintenance operations that occur outside the designated maintenance facilities (no motor vehicles i.e. cars, trucks, boats, etc. are maintained on the airfield. The facility allows plane washing activities near a storm drain drop inlet that discharges to outfall 005. Standard car wash limitations have been placed on this outfall.
This permit does not include a TMP.

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

Facility:	CHESAPEAKE MUNICIPAL AIRPORT
County/city:	CHESAPEAKE

VPDES NO.	VA0068209

DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTEWATER FACILITY
INSPECTION REPORT
PART 1

Inspection date:	**December 11, 2013**	Date form completed:	**December 16, 2013**
Inspection by:	**Clyde Gantt**	Inspection agency:	**DEQ/TRO**
Time spent:	**16 Hours**	Announced Inspection:	[X] Yes [ ] No
Reviewed by: **Kenneth T. Raum / 12-17-13** KTR		Photographs taken at site?	[X] Yes [ ] No
Present at inspection:	**Mr. Chris Schrantz – (757) 432-8110; cschrantz@chesapeakeairport.com**		

FACILITY TYPE:	FACILITY CLASS:
(X) Municipal	( ) Major
( ) Industrial	( ) Minor
( ) Federal	**(X)** Small
( ) VPA/NDC	( ) High Priority ( ) Low Priority

TYPE OF INSPECTION:

Routine	X	Reinspection		Compliance/assistance/complaint	

Date of previous inspection:	**May 14, 2009**	Agency:	**DEQ/TRO**

Population Served:		Connections Served:	

Last Month Average: Effluent	BOD_5 (mg/l)	**3**	TSS (mg/l)	**10**	Flow (MGD)	**.0023**	NH_3 (mg/l)	**0.1**
	Other:							
Last Quarter Average: Effluent	BOD_5 (mg/l)	**7**	TSS (mg/l)	**20**	Flow (MGD)	**.0018**	NH_3 (mg/l)	**0.2**
	Other:							

Has there been any new construction?	YES		NO	X
If yes, were the plans and specifications approved?	YES		NO	
DEQ approval date:				

COPIES TO: **(X)** DEQ/TRO; **(X)** OWNER; **(X)** OPERATOR; ( ) Other:

FACILITY: Chesapeake Municipal Airport VA0068209

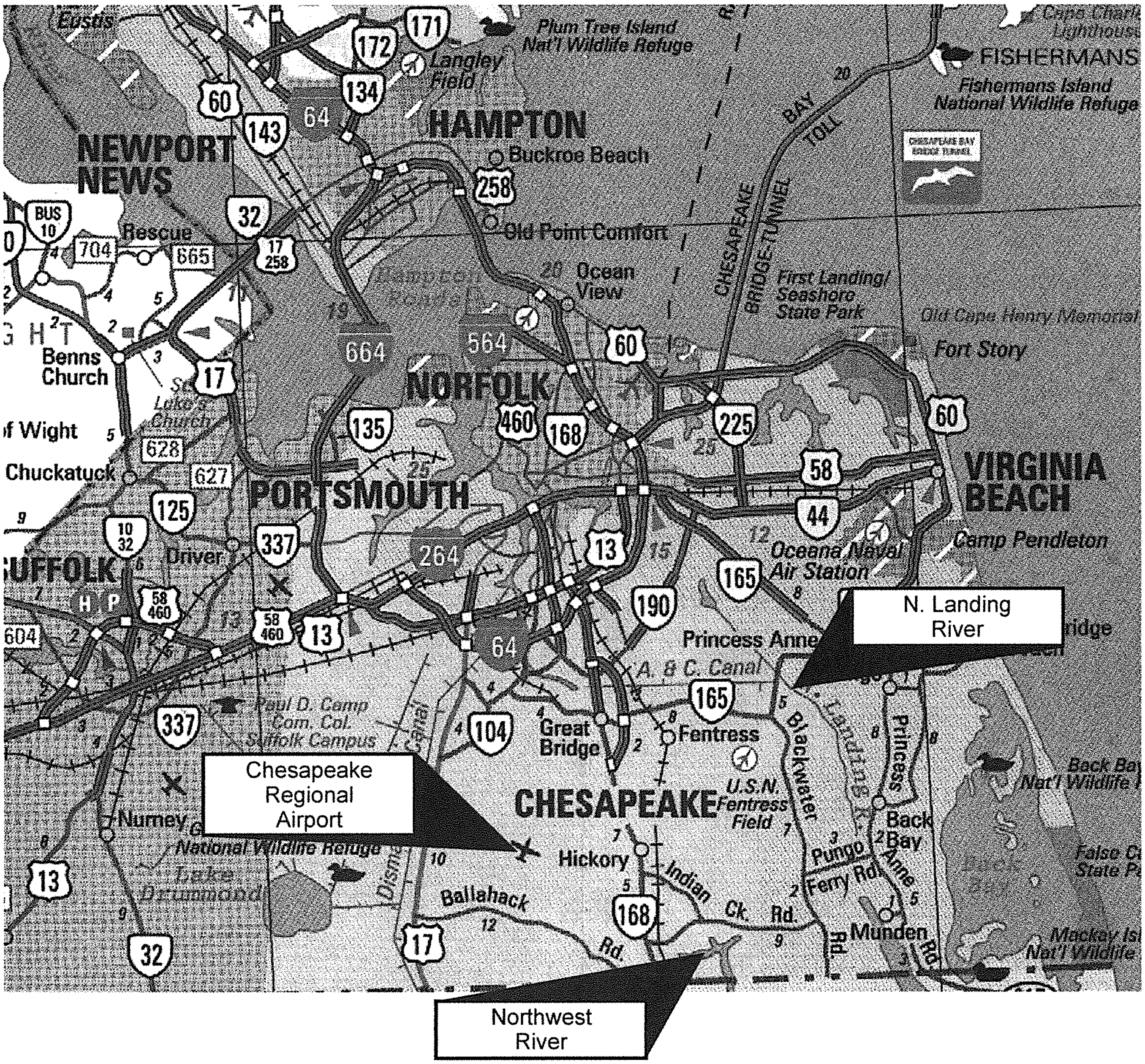
	PROBLEMS IDENTIFIED AT LAST INSPECTION:	CORRECTED	NOT CORRECTED
1	Quarterly visual stormwater examinations not performed.		X
2	Stormwater Annual Comprehensive Site Compliance Evaluation (ACSCE) not performed.		X
3	Stormwater site inspections not performed.		X
4	Pump station alarm inoperable.	X	
5	Oil spill in containment berm.	X	

SUMMARY

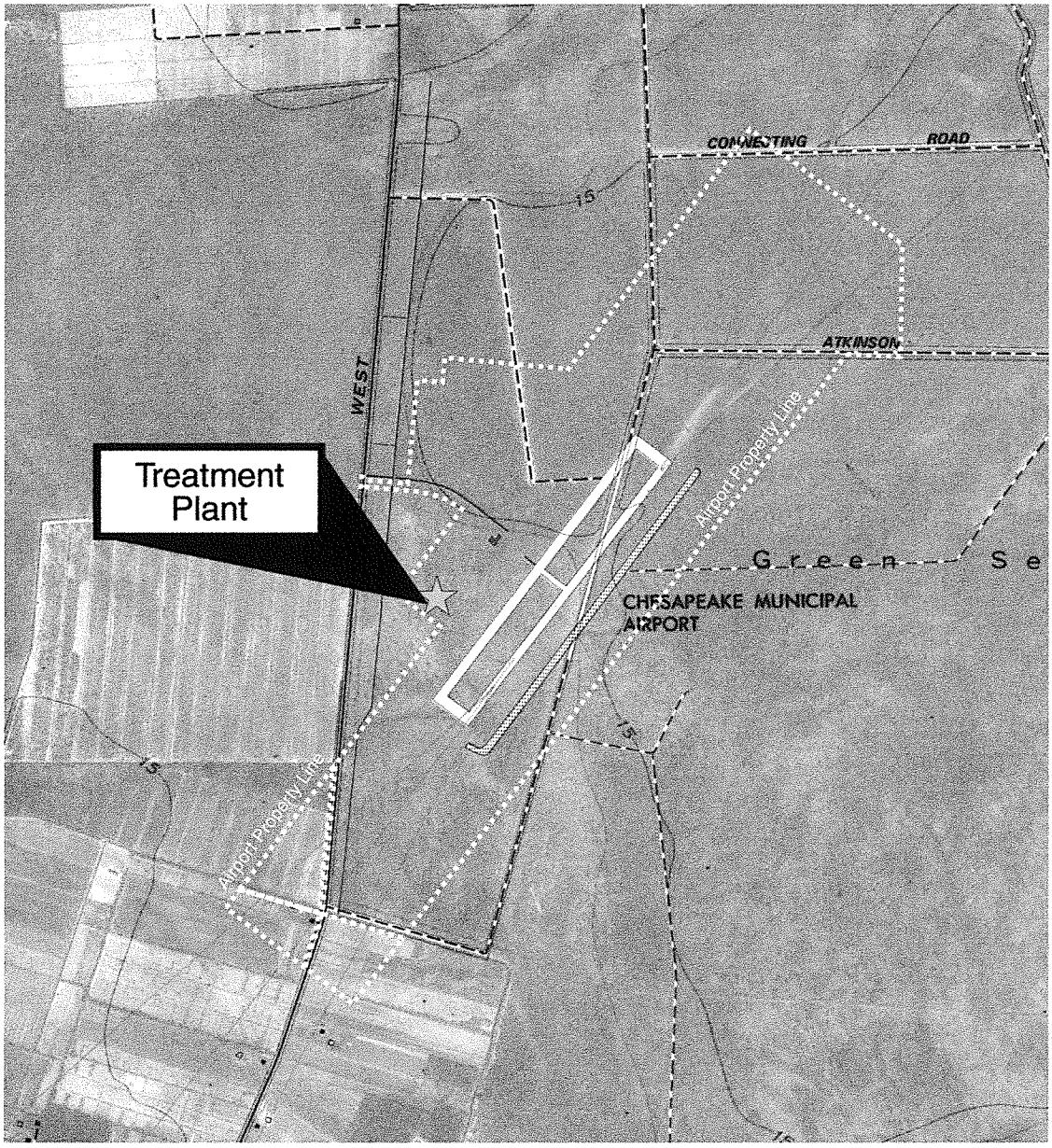
	INSPECTION COMMENTS:
1	On December 11, 2013 at approximately 11:30, I arrived on site planning to review the stormwater requirements. However, Mr. Schrantz, the Airport Manager was not available. I left the site and returned for the scheduled meeting with the wastewater operator at 1:30. I met with Mr. Wesley Warren, the operator and conducted the treatment plant inspection and laboratory inspection. Mr. Schrantz was at the plant for most of the inspection. During the inspection, an electrician was at the pump station to ensure that all the alarms were operational. After the treatment plant inspection, Mr. Schrantz and I returned to the airport office to review the permit and stormwater requirements. However, Mr. Schrantz was called away for a board member's telephone call and, as it was already 3:30, I opted to return the next morning. I returned on Dec. 12, 2013 at 10:15 and conducted an unaccompanied sampling inspection at the treatment plant. Afterwards, I met with Mr. Schrantz to complete the permit and SWPPP review. After the review, accompanied by Mr. Schrantz, I inspected the hangar, maintenance and fueling areas. We attempted to inspect outfall 004 located on the far side of the runway. However, the brush was grown up and there was no easy way to get to the outfall. I opted not to inspect the outfall. It should be noted that Mr. Schrantz has been the Airport Manager for approximately three months.
2	Other than the SWPPP, none of the stormwater requirements were available. There was no documentation of quarterly visual sampling, quarterly site inspections, annual comprehensive evaluation, staff training or evaluation for unauthorized discharges. The SWPPP had not been updated with Mr. Schrantz's signature.
3	The site map scale was too small to be useful. The map should focus on the "industrial area" and be in a large enough scale to show stormwater piping, drop inlets, direction of surface flow and structural BMPs.
4	Part I.D. of the permit, "Plane Washing Activities" requires effluent inspection; monitoring and activities log; no chemicals added to the washwater other than those posted on the wash station sign, and a sign be posted prohibiting the washing of planes bearing residue of toxic chemicals. The required sign is in place at the wash station. It does not address chemicals added to the washwater. The sign also requires prior notification of airport management of aircraft washing. That requirement should facilitate the requirement for monthly discharge inspections and sampling. The permit required washing activities log was not available. Mr. Schrantz indicated that a discharge had been created in September 2013 to get monitoring results.
5	As noted in #1 above, outfall 004 is not easily accessible. Access to that outfall must be available in order to conduct quarterly visual monitoring and DEQ inspection.

ATTACHMENT 2

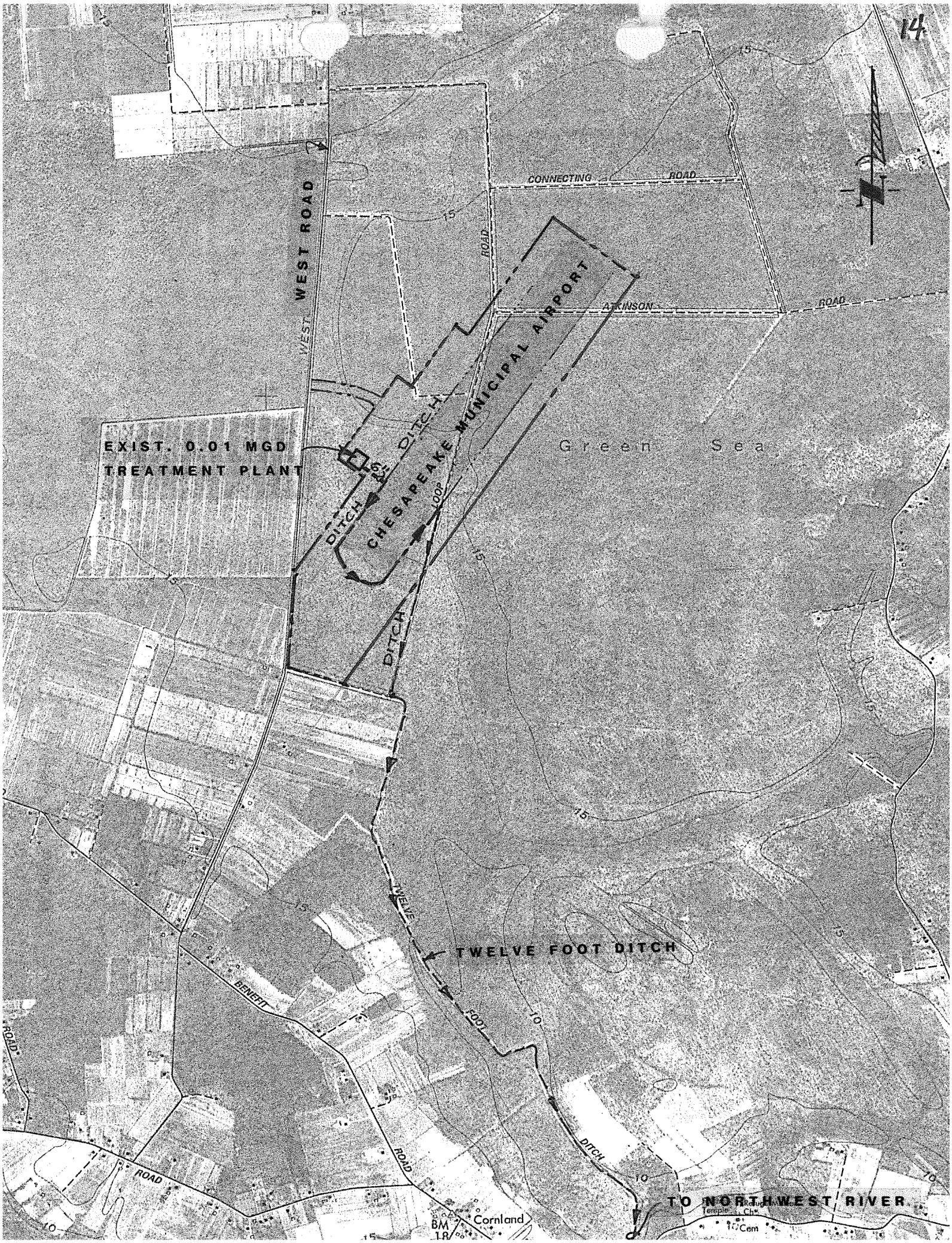
DISCHARGE LOCATION/TOPOGRAPHIC MAP


N. Landing
River
Chesapeake
Regional
Airport
Northwest
River
HAMPTON
NEWPORT
NEWS
NORFOLK
PORTSMOUTH
VIRGINIA
BEACH
CHESAPEAKE
SUFFOLK
Buckroe Beach
Old Point Comfort
Ocean
View
Langley
Field
Plum Tree Island
Nat'l Wildlife Refuge
Fishermans Island
National Wildlife Refuge
First Landing/
Seashore
State Park
Old Cape Henry Memorial
Fort Story
Camp Pendleton
Oceana Naval
Air Station
Princess Anne
A. & C. Canal
Great
Bridge
Fentress
U.S.N.
Fentress
Field
Hickory
Ballahack
Rd.
Indian
Ck.
Rd.
Blackwater
Pungo
Ferry Rd.
Back
Bay
Munden
Benns
Church
Chuckatuck
Driver
Rescue
Nurney
Paul D. Camp
Com. Col.
Suffolk Campus
Lake
Drummond
CHESAPEAKE
BRIDGE-TUNNEL
BAY
TOLL
FISHERMANS

B



DEEP CREEK 3A
TO LAKE DRUMMOND 3D


CONNECTING ROAD
WEST ROAD
ATKINSON ROAD
CHESAPEAKE MUNICIPAL AIRPORT
EXIST. 0.01 MGD TREATMENT PLANT
DITCH
DITCH
DITCH
LOOP
Green Sea
TWELVE FOOT DITCH
BENEFIT ROAD
ROAD
ROAD
DITCH
TO NORTHWEST RIVER
Cornland
BM 1R
Temple Ch
Cem

ATTACHMENT I

Outfall No(s). Receiving Stream

Outfall No. 001 - Wastewater Treatment Plant

Receiving Stream: Unnamed tributary to Twelve Foot Ditch to Northwest River
Basin: Chowan and Dismal Swamp
Subbasin: Albemarle Sound
Section: 1a
Class: III
Special Standard(s): none

Outfall No(s): 002 - Stormwater from a regulated industrial activity

Receiving Stream: Unnamed tributary to Twelve Foot Ditch to Northwest River
Basin: Chowan and Dismal Swamp
Subbasin: Albemarle Sound
Section: 1a
Class: III
Special Standard(s): none

Outfall No(s): 004 - Stormwater from a regulated non-industrial activity

Receiving Stream: Unnamed tributary to Twelve Foot Ditch to Northwest River
Basin: Chowan and Dismal Swamp
Subbasin: Albemarle Sound
Section: 1a
Class: III
Special Standard(s): none

Outfall No(s): 005 (Plane Wash Discharge and stormwater from property in the vicinity of the fuel farm)

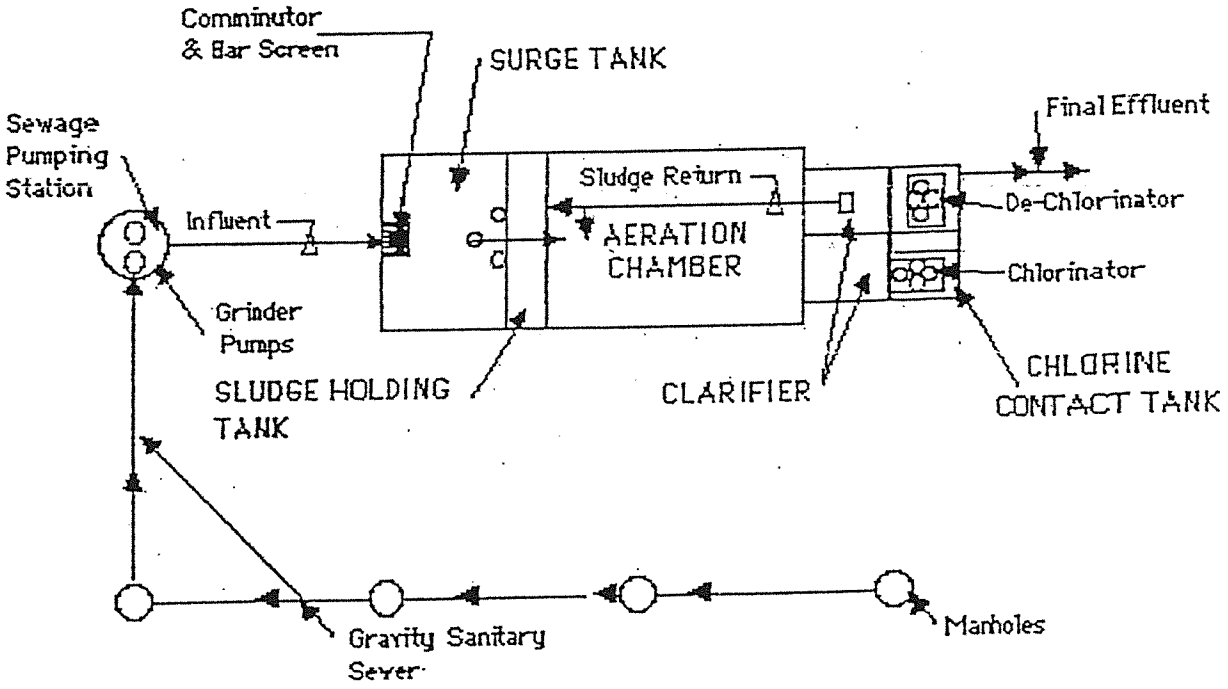
Receiving Stream: Twelve Foot Ditch to Northwest River
Basin: Chowan and Dismal Swamp
Subbasin: Albemarle Sound
Section: 1a
Class: III
Special Standard(s): none

ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/ WATER BALANCE

2.2 Flow Diagram:

The following is a flow diagram of the treatment plant.



15c

SLUDGE DISPOSAL PLAN FOR THE CHESAPEAKE REGIONAL AIRPORT SEWAGE TREATMENT PLANT

Aerated Sludge Holding Tank:

Volume = 165 CF or 1230 gallons
Aeration is by diffused aeration providing 75 cfm.

QUANTITY & QUALITY OF SLUDGE

Based on the treatment scheme such as, the extended aeration modification of the activated sludge process, the approximate pounds of sludge to be wasted to the aerated sludge holding tank each day is 1 cubic feet or approximately 7.5 gallons. Assuming 20-25% reduction of solids and maximum decanting of the supernatant before sludge withdrawal, 1000 gallons of sludge must be pumped each 167 days.

If sludge monitoring/analysis is not performed to classify the sludge, it will be assumed that the sludge will meet the requirements of a Class B sludge as defined in the Commonwealth of Virginia Sewerage Regulations, Section 25.07.05 because it is not totally stabilized.

If not dewatering facilities are available at this plant, it is assumed that the sludge solids content cannot meet the requirements for a dried or partially dried sludge.

SLUDGE REMOVAL

With a sludge holding tank capacity of 1230 gallons, the holding tank has a capacity of 205 days. Therefore, the sludge is to be dumped from the tank 1 time/year. Visual inspection by the operator will determine when pumping must be accomplished. The Health Department and the State Water Control Board will note the exact day of the sludge pumping in plant records for examination if desired.

SLUDGE HAULING

A reputable septic tank service company to be determined at the time of pumping will accomplish sludge pumping and hauling. Companies that will be considered based on availability today are:

1) Z. Artis
2) Duck's Pumping Service

It is explicitly understood that Chesapeake Regional Airport will have the final responsibility to insure the sludge is disposed correctly.

The hauling contractor will haul the sludge in a non-spill; watertight tank mounted on a truck normally used for such operation. He will haul it to HRSD-Nanesmond River Plant

owned by Hampton Roads Sanitation District whereby it will be delivered to the treatment or disposal site.

TRANSPORTATION ROUTE & TIMES

Start out going north on West Road towards Woodward Way. Turn right onto Drumcastle Lane. Turn left onto Scenic Parkway. Turn right onto Dominion Blvd. S/US-17N/VA-104. Turn left onto Cedar Road/VA-165. Continue to follow VA-165. VA-165 becomes George Washington Highway S/ US-17 Bus N. Turn right onto George Washington Highway N/US-17 Bus N. Continue to follow George Washington Highway N. Merge onto I-64 E toward I-664/Suffolk/Hampton. Keep left to take I-664 N via Exit 299B toward US-13/US-58/US-460/Suffolk/Newport News/Richmond. Take the exit toward Inspection Station. Turn slight right. Turn left. Turn right onto Armstead Road. Arrive at 6909 Armstead Road at the end of the road.

The approximate distance each way is 23 miles. To prevent nuisance to the populace along the hauling routes, the time of day the contractor will be allowed to haul will be between 9:30-11:30 am and 2:00-4:00 pm Monday through Friday.

SLUDGE TREATMENT

After reaching HRSD the hauling contractor will pay the set fee for sludge delivered. The contractor will be responsible for meeting all requirements placed on him which includes:

1) Checking and maintaining the proper pH before dumping of approximately 7.0.
2) Cleanup of any spillage during delivery or performing any other cleanup operations as deemed necessary by HRSD due to the delivery of the sludge.

After delivery of the sludge, HRSD will be solely responsible for final disposal of our sludge. The hauling contractor will report to us the quantity of sludge delivered, the time of day, and the exact method of disposal. We shall, in turn, note this on the regular monthly operating report.

HAULING CONTRACTOR PROPOSAL

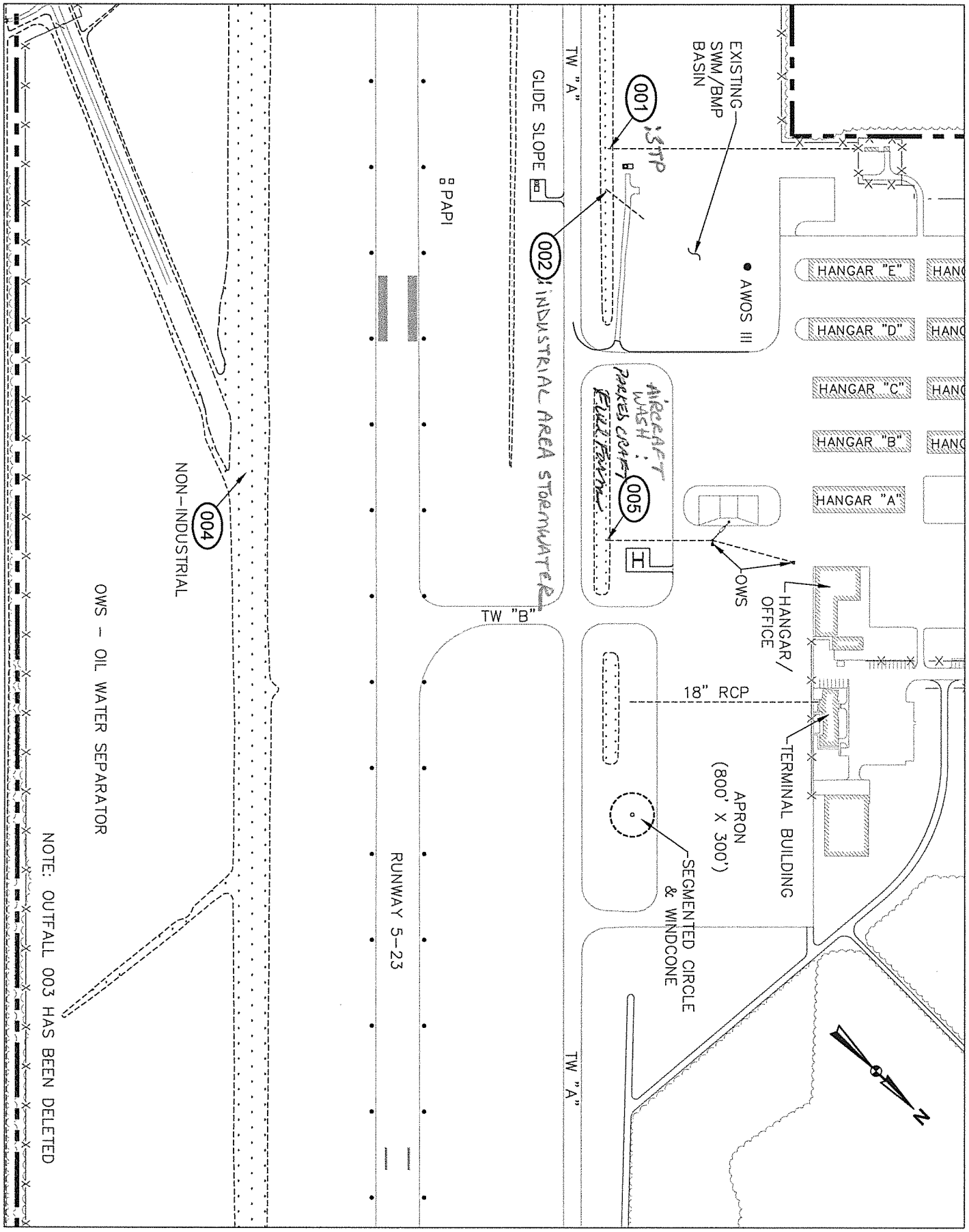
To make any prospective sludge hauling contractor aware of the content of the sludge disposal plan and to aid him in submitting a bid for the sludge hauling, the shall be given a copy of this sludge disposal plan bearing the approval of the State Health Department and the state Water Control Board.

TALBERT & BRIGHT
ENGINEERING & PLANNING CONSULTANTS
10105 KRAUSE ROAD, SUITE 100
CHESTERFIELD, VIRGINIA 23832
PHONE: 804-768-8878 FAX: 804-768-8871

Chesapeake Regional Airport
Scale : 1"=500'
VA0068209

LEGEND
EXISTING CANAL / SWM / SWQ
FLOW ARROW
CONTOUR
OIL / WATER SEPARATE
OWS

Note: Outfall 003 has been deleted



CHESAPEAKE REGIONAL AIRPORT

ATTACHMENT 4

TABLE I - DISCHARGE/OUTFALL DESCRIPTION

TABLE I

NUMBER AND DESCRIPTION OF OUTFALLS

OUTFALL NO.	DISCHARGE LOCATION	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001	N36°39'48.8" W76°19'40.7"	Domestic wastewater for airport buildings	Treatment consists of a bar screen, comminutor, surge tank, sludge holding tank, activated sludge package plant (extended aeration), clarification, chlorination/dechlor Sludge is pumped/hauled to HRSD Nansemond Plant.	.010 MGD
002	N36° 39'44.8" W76°19'33.9"	Stormwater runoff from regulated **INDUSTRIAL area** (t-hanger & apron parking area)	Settling (SWM basin)	Stormwater -rainfall dependent
004	N36°39'43.8" W76°19'20.6"	Stormwater runoff from regulated **NON-INDUSTRIAL area** of airport property (grassed/forested areas)	Canal/settling basin	Stormwater -rainfall dependent
005	N36°39'43.6" W76°19'20.7"	Stormwater runoff from regulated **INDUSTRIAL activity and** process discharge From plane washing activities, parked aircraft, fuel farm	Oil-water seperator(s)	Stormwater -rainfall dependent

(1) List operations contributing to flow
(2) Give brief description, unit by unit
(3) Give maximum 30-day average flow for industry and design flow for municipal

[Outfall 003 is no longer utilized and was deleted from permit coverage]

ATTACHMENT 5

TABLE II - EFFLUENT MONITORING/LIMITATIONS

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING
ATTACHMENT 5

OUTFALL # 001 DESIGN FLOW: .010 MGD
Outfall Description: Domestic wastewater from a small regional airport (buildings)
SIC CODE: 4581

(X) Final Limits ( ) Interim Limits Effective Dates - From: Issuance To: Expiration

PARAMETER & UNITS	BASIS FOR LIMITS	DESIGN FLOW MULTI-PLIER	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
			MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) [a] [2]	3	.010	NL	NA	NA	NL	1/Day	Estimated
pH (S.U.)	3		NA	NA	6.0	9.0	1/Day	Grab
BOD5 (mg/l) [d]	3		20	30	NA	NA	1/Month	Grab
BOD5 (kg/d)	3	.010	0.76	1.1	NA	NA	1/Month	Grab
TSS (mg/l) [d]	3		20	30	NA	NA	1/Month	Grab
TSS (kg/d)	3	.010	0.76	1.1	NA	NA	1/Month	Grab
TRC (ug/l) [c] [d]	2		8.0	9.6	NA	NA	1/Day	Grab
Fecal Coliform (N/CML)	2		200	NA	NA	NA	1/Month (Between 10am & 4pm)	Grab
D.O. (mg/l)	3		NA	NA	6.0	NA	1/Day	Grab
Ammonia N(NH4-N) (mg/l) [d]	2		3.4	3.4	NA	NA	1/Month	Grab
Total Phosphorus (kg/d) [b] [d]	3		NA	NA	NA	0.095	1/Month	Grab
Total Phosphorus Monthly Load (kg/m) [b] [f]	3		NA	NL	NA	NA	1/Month	CALC
Total Phosphorus Year-to-Date (kg/yr) [b] [f]	3		NA	NL	NA	NA	1/Month	CALC
Total Phosphorus Calendar Year (kg/yr) [b] [e] [f]	3		34.52	NA	NA	NA	1/YR	CALC

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING
ATTACHMENT 5
Continued...

OUTFALL # 001 DESIGN FLOW: .010 MGD
Outfall Description: Domestic wastewater from a small regional airport (buildings)
SIC CODE: 4581

NA = NOT APPLICABLE;
NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/Year = In accordance with the following schedule: January 1- December 31, due by January 10th.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.D.5. for exceeding 95% of the design capacity 3 months consecutively.

[b] See Part I.B. for Schedule of Compliance. No monitoring or reporting required until after completion of the schedule.

[c] See Part I.C. for other total residual chlorine limitations and bacterial effluent limitations, if applicable

[d] See Parts I.D.6. and I.D.7. for quantification levels and reporting requirements, respectively.

[e] Annual average limitation, based on a calulation of all samples collected during the calendar year.

[f] See Part I.C.10. for additional instructions regarding total phosphorus.

2. The design flow of this treatment facility is 0010 MGD.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. At least 85% removal for BOD and TSS must be attained for this effluent.

The bases for the limitations codes are:
1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING
ATTACHMENT 5
Continued...

PART I

OUTFALLS 002 - STORM WATER DISCHARGES:

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number: 002 (T-hanger buildings and parked aircraft on asphalt apron)

   Such discharges shall be limited and monitored by the permittee as specified below:

THIS OUTFALL SHALL CONTAIN STORM WATER RUNOFF ASSOCIATED WITH A REGULATED **INDUSTRIAL ACTIVITY** WHERE NO CHEMICAL MONITORING IS REQUIRED. THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER FROM THESE OUTFALLS.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
3. See Part I. F. for additional storm water monitoring and plan requirements.

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING
ATTACHMENT 5
Continued...

PART I

OUTFALLS 004 - STORM WATER DISCHARGES:

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number: 004 (runoff from grassed/forested areas)

   Such discharges shall be limited and monitored by the permittee as specified below:

THIS OUTFALL SHALL CONTAIN STORM WATER RUNOFF ASSOCIATED WITH A REGULATED **NON INDUSTRIAL ACTIVITY** WHERE NO CHEMICAL MONITORING IS REQUIRED. THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER FROM THESE OUTFALLS.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING
ATTACHMENT 5
Continued...

PART I

OUTFALL 005: PLANE WASHING ACTIVITIES

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge storm water runoff and wastewater generated from plane washing activities to outfall number 005.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Minimum	Maximum	Frequency	Sample Type
Flow (GPD) [a]	NA	NL	1/Month	Estimate
pH (S.U.)	6.0	9.0	1/Month	Grab
TSS (mg/l) [b]	NA	60	1/Month	Grab
Oil and Grease (mg/l) [b]	NA	15	1/Month	Grab

NL - No Limitation, monitoring requirement only
NA - Not applicable

Grab - Sample to be taken when plane washing activities are contributing to the discharge. A sign shall be posted at the designated plane washing area to notify management 24 hrs. in advance of the event so that sampling arrangements can be made. Every effort should be made to sample the first plane washing activity of each month.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.E. for other conditions or limitations concerning this activity.
[b] See Parts I.D.6. and I.D.7. for quantification levels and reporting requirements, respectively.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
3. See Part I. F. for additional storm water monitoring and plan requirements during wet weather flows.

TABLE II - MUNICIPAL MINOR EFFLUENT LIMITATIONS
Attachment 5 continued

Outfall 001:

Final Chlorine Limitations Effective Dates - From: permit issuance To: permit expiration

TRC **	AFTER CL2 CONTACT TANK (Dechlor. Required)			AFTER DECHLORINATION		AFTER CL2 CONTACT TANK (Dechlor. Not Required)				
	MIN.	EXC.	INST. MIN.	WKLY AVG.	INST. MAX.	PERMIT RANGE	EXC.	REPORT-ING RANGE	EXC.	TECH. MAX.
a) Non-Detect. Dechlor. Required	**1.0**	**3**	**0.6 mg/l**	**9.6 ug/l**	---	NA	NA	NA	NA	NA
b) Detect. Dechlor. Required	---	---	---	---	---	NA	NA	NA	NA	NA
c) No Dechlor.	NA	NA	NA	NA	NA	---	---	---	---	---

*Totalizing, Indicating & Recording Equipment

** --Chlorine mass balance Cw (W for Tidal systems): check one

__X__ a) $C_w < 0.1$ mg/l [dechlor. required, non-detectable format]

_____ b) 0.1 mg/l $\leq C_w <$ 2.0 mg/l (2.5 mg/l for PWS, Shellfish waters) [dechlor. required, detectable format]

_____ c) $C_w > 2.0$ mg/l (2.5 mg/l for PWS, Shellfish waters) [dechlor. not required, include a restrictive technology max. value]

The design flow of this treatment facility is 0.010 MGD.

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

See Part I.C. for additional TRC limitations.

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Chesapeake Regional Airport
ADDRESS 2800 Airport Dr, Ste 1
Chesapeake VA 23323
FACILITY LOCATION 1777 West Road, Chesapeake, VA 23323

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

VA0068209	001
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

Municipal Minor 08/15/2014

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
001 FLOW	REPORTD				*********	*********	*********				
	REQRMNT	0.010	NL	MGD	*********	*********	*********			1/DAY	EST
002 pH	REPORTD	*********	*********			*********					
	REQRMNT	*********	*********		6.0	*********	9.0	SU		1/DAY	GRAB
003 BOD5	REPORTD				*********						
	REQRMNT	0.76	1.1	KG/D	*********	20	30	MG/L		1/M	GRAB
004 TSS	REPORTD				*********						
	REQRMNT	0.76	1.1	KG/D	*********	20	30	MG/L		1/M	GRAB
006 COLIFORM, FECAL	REPORTD	*********	*********		*********		*********				
	REQRMNT	*********	*********		*********	200	*********	N/CML		1/M	GRAB
007 DO	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		6.0	*********	*********	MG/L		1/DAY	GRAB
039 AMMONIA, AS N	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	3.4	3.4	MG/L		1/M	GRAB
157 CL2, TOTAL CONTACT	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		1.0	*********	*********	MG/L	3	1/DAY	GRAB

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
QL's: BOD5 = 2 mg/l; TSS = 1.0 mg/l; TP = 0.1 mg/l; CL2 = 0.1 mg/l (100 ug/l); NH3-N = 0.20 mg/l

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Chesapeake Regional Airport
ADDRESS 2800 Airport Dr, Ste 1
Chesapeake VA 23323
FACILITY LOCATION 1777 West Road, Chesapeake, VA 23323

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

VA0068209	001
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

Municipal Minor 08/15/2014

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
165 CL2, INST RES MAX	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	8.0	9.6	UG/L		1/DAY	GRAB
213 CL2, INST TECH MIN LIMIT	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		0.6	*********	*********	MG/L		1/DAY	GRAB
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
QL's: BOD5 = 2 mg/l; TSS = 1.0 mg/l; TP = 0.1 mg/l; CL2 = 0.1 mg/l (100 ug/l); NH3-N = 0.20 mg/l

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Chesapeake Regional Airport
ADDRESS 2800 Airport Dr, Ste 1
Chesapeake VA 23323
FACILITY LOCATION 1777 West Road, Chesapeake, VA 23323

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Municipal Minor 08/07/2014

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462

NOTE: **READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.**

VA0068209	005
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
001 FLOW	REPORTD	*********			*********	*********	*********				
	REQRMNT	*********	NL	GPD	*********	*********	*********			1/M	EST
002 pH	REPORTD	*********	*********			*********					
	REQRMNT	*********	*********		6.0	*********	9.0	SU		1/M	GRAB
004 TSS	REPORTD	*********	*********		*********	*********					
	REQRMNT	*********	*********		*********	*********	60	MG/L		1/M	GRAB
500 OIL & GREASE	REPORTD	*********	*********		*********	*********					
	REQRMNT	*********	*********		*********	*********	15	MG/L		1/M	GRAB
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
QL's: TSS = 1.0 mg/l; O & G = 5.0 mg/l

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

25

ATTACHMENT 6

EFFLUENT LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA/ ANTIDEGRADATION/ANTIBACKSLIDING

rec 7/11/14 via email 31

CHESAPEAKE REGIONAL AIRPORT
REISSUANCE OF VPDES PERMIT
VPDES PERMIT NO. VA0068209

APPLICATION FORM 2F – SUPPLEMENTAL INFORMATION

POTENTIAL POLLUTION SOURCES

Outfall 001

The area that drains to Outfall 001 has one primary source of pollution which is the airports current water treatment plant. No other developed area drains to this point.

No de-icing chemicals are used in this area.

Outfall 002

Outfall 002 is the primary outfall for the airport's southern developed terminal area. In this area are 10 t-hangar/corporate hangar buildings that store approximately 100 aircraft. There is also an asphalt apron that holds approximately 20 aircraft by means of rope tie-downs as well as the airport maintenance building. Potential pollutant sources from these facilities include leakage of oil/grease/fuel from parked aircraft, runoff from paved surfaces and minimal erosion from the existing storm water management facility.

No de-icing chemicals are used in this area.

Outfall 004 (non-industrial)

Normal runoff from grassed/forested areas is anticipated in this location. No de-icing chemicals are used in this area.

Outfall 005

Outfall 005 is the primary outfall for the main terminal area and the existing fuel farm. Drainage to this location also includes the existing aircraft tie-down ramp which holds approximately 36 aircraft. Potential pollutant sources from these areas include leakage of oil/grease/fuel from parked aircraft, fuel from the existing fuel farm and oil/grease from the existing oil/water separators.

No de-icing chemicals are used in this area.

ATTACHMENT 6

VPDES PERMIT PROGRAM

Rationale for Effluent Limitations and Monitoring

Monitoring frequency for BOD5, TSS and ammonia will be 1/month and all other parameters, with the exception of fecal coliform (1/month), will be monitored 1/Day, based upon a design flow of 0.010 MGD and best professional judgment.

BOD/TSS/pH and D.O. limitations were based upon best professional judgment and past water quality monitoring results (reference attachment 8 for details and basis). TRC, fecal coliform and ammonia limitations were based upon water quality standards and/or modeling results.

Mass loading limits for total phosphorus were applied by the assignment of a total maximum daily load (TMDL) to the Twelve Foot Ditch discharge segment. TMDL is a term that represents the total pollutant a water body can assimilate and still meet water quality standards. The TMDL was developed for total phosphorus due to the low dissolved oxygen impairment (failure to meet water quality standard for dissolved oxygen) for the Northwest River watershed. EPA approved the TMDL April 26, 2011 and SWCB approved the TMDL June 25, 2012. The facility was assigned a waste load allocation (WLA) of an average annual load of 34.52 kg/yr and a maximum daily load of 0.095 kg/day total phosphorus (TP). A schedule of compliance was added to the permit to allow time for the facility to achieve compliance with the new TMDL for total phosphorus.

OUTFALL 001 - Municipal treatment and Discharge

Flow: No limit; monitoring 1/day, estimate - standard requirement for a municipal permit with this design flow.

pH: Minimum of 6.0 s.u., maximum of 9.0 s.u. - BPJ to protect water quality in the receiving stream.

BOD5
& TSS: Monthly average limit of 20 mg/l (0.76 kg/d) and a weekly average limit of 30 mg/l (1.1 kg/d) were based upon best professional judgment (water quality monitoring results and no WQ problems indicated (reference attachment 8 for details and basis); grab sample

Ammonia-N: Monthly and weekly average limit of 3.4 mg/l was based upon the most recent water quality modelling for toxics (OWPP Guidance 00-2011) - reference attachment 8 for details); The facility's historical data base indicates that it can consistently meet this tighter limit, therefore a compliance schedule is unnecessary; grab sample.

D.O.: Limit of 6.0 mg/l minimum - BPJ; grab sample.

Fecal Coliform: monthly average limit of 200 N/CML is per water quality standards (9 VAC 25-260-170) placed in this permit as a check/precautionary measure of adequacy of chlorine disinfection to protect a public water supply in the watershed; grab sample; 1/Month (between 10am-4pm)

TRC: Limits of 8.0 ug/l monthly average and 9.6 ug/l weekly average are included in this permit based upon past and present modeling results (reference attachment 8). This is in accordance with the VPDES Permit Manual and OWPP Guidance 00-2011. Demonstration studies by other permittees have shown that chlorine is an adequate surrogate for measuring compliance with the bacteria standards (effective disinfectant for e. coli and other pathogens). Therefore, appropriate Cl2 limitations at this facility preclude the need for an e. coli limitation. Alternative disinfection methodologies require an e. coli limit as stipulated in Part 1. B. of the permit.

TP: limited by 0.095 kg/d maximum; 1 per month; basis is best professional judgment to protect water quality of the receiving stream using mass loadings. Mass loadings are based on TMDL WLA for the receiving stream segment; grab.

TP Monthly Load: not limited kg/m weekly average; 1 per month; calculation; basis is best professional judgment to protect water quality of the receiving stream using mass loadings. Mass loadings are based on TMDL WLA for the receiving stream segment.

TP Year-to-Date: not limited kg/yr weekly average; 1 per month; calculation; basis is best professional judgment to protect water quality of the receiving stream using mass loadings. Mass loadings are based on TMDL WLA for the receiving stream segment.

TP Calendar Year: limited by 34.52 kg/yr monthly average; 1 per year; calculation; basis is best professional judgment to protect water quality of the receiving stream using mass loadings. Mass loadings are based on TMDL WLA for the receiving stream segment.

Mass Loading (kg/d) = Flow (MGD) X Concentration (mg/l) X 3.785

ATTACHMENT 6

VPDES PERMIT PROGRAM

Rationale for Effluent Limitations and Monitoring
Continued.....

Outfalls 002 & 005: Storm Water Discharges

These outfalls authorize the discharge of storm water from a regulated activity which in the case of 002 do not require monitoring (in accordance with OWRM Guidance Memo No. 93-010A). A stormwater pollution prevention plan (SWPPP) is required. Facility-specific storm water conditions found in **9VAC25-151-260. Sector S - Air transportation** were not required since there are no maintenance operations that occur outside the designated maintenance facilities. There are no other motor vehicles (i.e. cars, trucks, boats, etc.) maintained on the airfield.

Outfall 005 - Discharge wastewater generated from plane washing activities:

Parameter	Minimum	Maximum	Monitoring Frequency	Sample Type
Flow (GPD)[a]	NA	NL	1/Month	Estimate
pH (S.U.)	6.0*	9.0*	1/Month	Grab
TSS (mg/l)[b]	NA	60	1/Month	Grab
Oil and Grease (mg/l)	NA	15	1/Month	Grab

Limitations were based upon standard GP car wash limitations. The pH limitation is based upon Virginia's stream water quality standards (9 VAC 25-260-50 et seq. and 9 VAC 25-260-380 et seq.). The total suspended solids and oil/grease parameters are based on best engineering judgment for the type of treatment employed by these systems. Complying with these parameters is an indication that the treatment system is being operated and maintained properly and is producing an acceptable quality effluent.

Monitoring frequencies and sample type are based upon BPJ.

ANTIDEGRADATION REVIEW

The receiving stream has been classified as tier 1; therefore, no further review is needed. Permit limits have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

There are ***no antibacksliding issues*** to address.

4.4 Estimating Total Phosphorus Loads

4.4.1 Point Sources

There are currently three VPDES permits and eight (8) general domestic permits in the impaired watershed and none in the reference watershed. Seven of the general permitted point source was assumed to discharge at a design flow of 1,000 gallons per day and a total phosphorus concentration of 2.5 mg/L resulting in 3.45 kilograms of phosphorus per year. The eighth general permit design flow was 4,000 gallons per day. There are also two phase 1 municipal storm water permits for Cities of Chesapeake and Virginia Beach that discharge within the watershed. The point sources are listed in Table 4.5.

Table 4.5 Point sources in Northwest River watershed.

Point Source	Design Flow (million gallons per day)	Annual Phosphorus Load (kg/yr)
VA0068209	0.01	34.52
VA0024244	0.3	1,035.48
VA0060526	0.544	1,877.68
VAG403052	0.004	13.8
VAG403062	0.001	3.45
VAG403064	0.001	3.45
VAG403067	0.001	3.45
VAG403011	0.001	3.45
VAG403040	0.001	3.45
VAG403037	0.001	3.45
VAG403058	0.001	3.45
MS4-Chesapeake VA0088625	0.124*	428.31
MS4-Virginia Beach VA0088676	0.001*	4.30

* Estimated daily flow.

4.4.2 Nonpoint Sources

The annual phosphorus loads from the impaired watershed as well as the reference watershed were estimated using the Generalized Watershed Loading Functions (GWLF) model. Phosphorus loading from nonpoint sources is a function of the land use.

Table 5.3 Average annual phosphorus TMDL for Northwest River watershed.

Impairment	WLA kg/yr	LA kg/yr	MOS kg/yr	TMDL kg/yr
Northwest River	**3,262.86**	**5,401.05**	**962.67**	**9,626.58**
Permits:				
VA0068209	34.52			
VA0024244	1,035.48			
VA0060526	1,877.68			
VAG403052	13.8			
VAG403062	3.45			
VAG403064	3.45			
VAG403067	3.45			
VAG403011	3.45			
VAG403040	3.45			
VAG403037	3.45			
VAG403058	3.45			
MS4-Chesapeake VA0088625	179.16			
MS4-VA Beach VA0088676	1.80			
Future Growth	96.27			

Starting in 2007, the USEPA has mandated that TMDL studies include a maximum "daily" load (MDL) as well as the average annual load previously shown. The approach to developing a daily maximum load was similar to the USEPA approved approach found in the 2007 document titled Options for Expressing Daily Loads in TMDLs (USEPA, 2007). The procedure involved calculating the MDL from the long-term average annual TMDL load in addition to a coefficient of variation (CV) estimated from the annual load for ten years. The annual phosphorus load ranged from 5,045 kg to 20,851 kg with a coefficient of variation (CV) of 0.41. A multiplier was used to estimate the MDL from the long-term average based on the USEPA guidance. The multiplier estimated for the Northwest River was 2.72. In this case, the long-term average was the annual TMDL divided by 365 days (26.37 kg/day) resulting in a MDL of 71.74 kg/day. The daily WLA was estimated as the annual WLA divided by 365. The daily MOS was estimated as 10% of the MDL. Finally, the daily LA was estimated as the MDL minus the daily MOS minus the daily WLA. These results are shown in Table 5.4.

Table 5.4 Maximum daily phosphorus loads (kg/day) for Northwest River.

Impairment	WLA* kg/day	LA kg/day	MOS kg/day	TMDL kg/day
Northwest River	**8.94**	**55.63**	**7.17**	**71.74**
Permits:				
VA0068209	0.095			
VA0024244	2.837			
VA0060526	5.144			
VAG403052	0.038			
VAG403062	0.009			
VAG403064	0.009			
VAG403067	0.009			
VAG403011	0.009			
VAG403040	0.009			
VAG403037	0.009			
VAG403058	0.009			
MS4-Chesapeake VA0088625	0.491			
MS4-VA Beach VA0088676	0.005			
Future Growth	0.264			

* WLA is expressed as the summation of all individual permit loads.

ATTACHMENT 7

SPECIAL CONDITIONS RATIONALE

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE
Attachment 7

B. SCHEDULE OF COMPLIANCE FOR TOTAL PHOSPHORUS

Rationale: In accordance with the VPDES Permit Regulation, 9 VAC 25-31-250, and 40 CFR 122.47, the permit may, when appropriate, specify a schedule of compliance leading to compliance with the Clean Water Act, laws and regulations.

C. Additional Total Residual Chlorine (TRC) Limitations and Monitoring Requirements

Rationale: Required by Water Quality Standards, 9VAC 25-260-170, Fecal coliform bacteria; other waters. Also, 40 CFR 122.41(e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment in order to comply with the permit. This ensures proper operation of chlorination equipment to maintain adequate disinfection.

D. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Permit Reopeners

a. Sludge Reopener

Rationale: Required by the VPDES Permit Regulation, 9 VAC 25-31-220 C., and 40 CFR 122.44 (c)(4), which note that all permits for domestic sewage treatment plants (including sludge-only facilities) include any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act.

b. Total Maximum Daily Load (TMDL) Reopener

Rationale: For specified waters, Section 303(d) of the Clean Water Act requires the development of total maximum daily loads necessary to achieve the applicable water quality standards. The TMDL must take into account seasonal variations and a margin of safety. In addition, Section 62.1-44.19:7 of the State Water Control Law requires the development and implementation of plans to address impaired waters, including TMDLs. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to incorporate the requirements of a TMDL once it is developed. In addition, the reopener recognizes that, in according to Section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other wasteload allocation prepared under Section 303 of the Act.

2. Licensed Operator Requirement

Rationale: The Permit Regulation, 9 VAC 25-31-200 D and Code of Virginia 54.1-2300 et. seq., Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators.

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE
Attachment 7 continued

3. Reliability Class

Rationale: Required by Sewage Collection and Treatment Regulations, 12 VAC 5-581-20 and 120 for all municipal facilities.

4. CTC, CTO and O & M Manual Requirements

Rationale: Required by the State Water Control Law, Section 62.1-44.19; the Sewage Collection and Treatment Regulations (12 VAC 5-581 et seq); Section 401 of the Clean Water Act; 40 CFR 122.41(e); and the VPDES Permit Regulation (9 VAC-25-31-190E).

5. 95% Design Capacity Notification

Rationale: Required by the VPDES Permit Regulation, 9 VAC 25-31-200 B.2. for all POTW and PVOTW permits. Best professional judgement is used to apply this condition to other (private) municipal treatment facilities.

6. Quantification Levels Under Part I.A.

Rationale: States are authorized to establish monitoring methods and procedures to compile and analyze data on water quality, as per 40 CFR part 130, Water Quality Planning and Management, subpart 130.4.

7. Compliance Reporting Under Part I.A.

Rationale: Defines reporting requirements for toxic parameters with quantification levels and other limited parameters to ensure consistent, accurate reporting on submitted reports.

8. Indirect Dischargers

Rationale: Required by VPDES Permit Regulation, 9 VAC 25-31-200 B.1. for POTWs and PVOTWs that receive waste from someone other than the owner of the treatment works.

9. Sludge Use and Disposal/ Sludge Management Plan

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-420, and 40 CFR 503.1 specify the purpose and applicability for sludge management plans. The VPDES Permit Regulation, 9 VAC 25-31-100 J.4., also sets forth certain detailed information which must be included in a sludge management plan. The VPDES sewage sludge permit application form and its attachments constitute the sludge management plan and will be considered for approval with the VPDES permit. In addition, the Biosolids Use Regulation, 12 VAC 5-585-330 and 340, specifies the general purpose and control requirements for an O&M manual in order to facilitate proper O&M of the facilities to meet the requirements of the regulation.

10. Nutrient Reporting Calculations

Rationale: §62.1-44.19:13 of the Code of Virginia defines how annual nutrient loads are to be calculated. The TMDL WLA for this facility as assigned is not in the form of a concentration limit (mg/l) as defined in the above statute but rather in a mass load (kg/d) and therefore the conversion from concentration limit to mass load part of the calculation is not required

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE
Attachment 7 continued

in order to demonstrate compliance with the WLA as required by the TMDL.
Sludge Management Plan

11. Materials Handling and Storage

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-50 A., prohibits the discharge of any wastes into State waters unless authorized by permit. The State Water Control Law, Sec. 62.1-44.18:2, authorizes the Board to prohibit any waste discharge which would threaten public health or safety, interfere with or be incompatible with treatment works or water use. Section 301 of the Clean Water Act prohibits the discharge of any pollutant unless it complies with specific sections of the Act.

12. Connection to Central Sewage Facilities

Rationale: The VDH encourages all small dischargers within close proximity to drinking water supplies to connect to central facilities if they become available. This condition is typically placed upon small domestic facilities that may obtain central treatment access in their area in the forseeable future.

E. PLANE WASHING ACTIVITIES

Rationale: 9 VAC 25-31-10 et seq., and 40 CFR 122.41(e) require proper operation and maintenance of the permitted facility. Other conditions were placed in order to assure protection of water quality and beneficial uses of the waters receiving the discharge.

F. STORM WATER CONDITIONS/SWPP

Rationale: The Clean Water Act 402(p) (2) (B) requires permits for storm water discharges associated with industrial activity. VPDES permits for storm water discharges must establish BAT/BCT requirements in accordance with 402(p)(3) of the Act. The Storm Water Pollution Prevention Plan is the vehicle proposed by EPA in the final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity (Federal Register Sept 9, 1992) to meet the requirements of the Act.

ATTACHMENT 8

RECEIVING WATERS INFO.
TIER DETERMINATION/STORET DATA/
STREAM MODELING

TMDL Permit Review

Date: 7/24/2014

To: Jennifer Howell, TRO √ JSH 8/11/2014

Permit Writer: R.E. Smithson

Facility: Chesapeake Regional Airport WWTP

Permit Number: VA0068209

Issuance, Reissuance or Modification (if Modification describe) : Reissuance

Permit Expiration Date: 11/8/2014

Waterbody ID (ex: VAT-G15E): VAT-K40R

Topo Name: Deep Creek 3A/ Lake Drummond 3D

Facility Address:

2800 Airport Drive, Chesapeake, VA 23323

Receiving Stream: Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

Stream Name: X-Trib to Twelve Foot Ditch to Northwest River	
Click here to enter text.	
Outfall #: 001	**Lat Lon: 36-39-48.8N/ 76-19-40.7W**
Outfall #: 002	**Lat Lon: 36-39-44.8N/ 76-19-33.9W**
Outfall #: 004	**Lat Lon: 36-39-43.8N/ 76-19-20.6W**
Stream Name (2): Twelve Foot Ditch to Northwest River	
Click here to enter text.	
Outfall #: 005	**Lat Lon: 36-39-43.6N/ 76-19-20.7W**
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

Is there a design flow change? If yes give the change. Click here to enter text.

TMDL Review:

Is a TMDL IN PROGRESS for the receiving stream? No	
Has a TMDL been APPROVED that includes the receiving stream?	
Yes, see below	
If yes, Include TMDL Name, Pollutant(s) and date of approval:	
Total Maximum Daily Load Development for the Northwest River Watershed-A Total Phosphorus TMDL Due to Low Dissolved Oxygen Impairment: Total Phosphorus: EPA approved 4/26/2011, SWCB approved 6/25/2012	
Is the facility assigned a WLA from the TMDL?	Yes, see below
If Yes, what is the WLA?	
Total Phosphorus Annual Load: 34.52 kg/yr (Table 5.3 in Attachment 1) Total Phosphorus Daily Load: 0.095 kg/day (Table 5.4 in Attachment 1)	

Review will be completed in 30 days of receipt of request.

Additional Comments:

VA0068209 TMDL ATTACHMENT 1.pdf

Table 5.3 Average annual phosphorus TMDL for Northwest River watershed.

Impairment	WLA* kg/yr	LA kg/yr	MOS kg/yr	TMDL kg/yr
Northwest River	**3,262.86**	**5,401.05**	**962.67**	**9,626.58**
Permits:				
VA0068209	34.52			
VA0024244	1,035.48			
VA0060526	1,877.68			
VAG403052	13.8			
VAG403062	3.45			
VAG403064	3.45			
VAG403067	3.45			
VAG403011	3.45			
VAG403040	3.45			
VAG403037	3.45			
VAG403058	3.45			
MS4-Chesapeake VA0088625	179.16			
MS4-VA Beach VA0088676	1.80			
Future Growth	96.27			

* WLA is expressed as the summation of all individual permit loads.

Table 5.4 Maximum daily phosphorus loads (kg/day) for Northwest River.

Impairment	WLA* kg/day	LA kg/day	MOS kg/day	TMDL kg/day
Northwest River	**8.94**	**55.63**	**7.17**	**71.74**
Permits:				
VA0068209	0.095			
VA0024244	2.837			
VA0060526	5.144			
VAG403052	0.038			
VAG403062	0.009			
VAG403064	0.009			
VAG403067	0.009			
VAG403011	0.009			
VAG403040	0.009			
VAG403037	0.009			
VAG403058	0.009			
MS4-Chesapeake VA0088625	0.491			
MS4-VA Beach VA0088676	0.005			
Future Growth	0.264			

* WLA is expressed as the summation of all individual permit loads.

Planning Permit Review

Date: 7/24/2014

To: Kristie Britt, TRO

Permit Writer: RE Smithson

Facility: Chesapeake Municipal Airport WWTP

Permit Number: VA0068209

Issuance, Reissuance or Modification (if Modification describe): Reissuance

Permit Expiration Date: 11/8/2014

Waterbody ID (ex: VAT-G15E): K40R

Topo Name: Deep Creek 3A/ Lake Drummond 3D

Facility Address:

2800 Airport Drive, Chesapeake, VA 23323

Receiving Stream: Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

Stream Name: X-Trib to Twelve Foot Ditch to Northwest River	
Stream Data Requested?	
Outfall #: 001	**Lat Lon: 36-39-48. 8N/ 76-19-40.7W**
Outfall #: 002	**Lat Lon: 36-39-44.8N/76-19-33.9W**
Outfall #: 004	**Lat Lon: 36-39-43.8N/76-19-20.6W**
Stream Name (2): Twelve Foot Ditch to Northwest River	
Stream Data Requested?	
Outfall #: 005	**Lat Lon: 36-39-43.6N/76-19-20.7**
Outfall #:	**Lat Lon:**
Outfall #:	**Lat Lon:**

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

Planning Review:

303 (d): Indicate Outfalls which discharge directly to an impaired (Category 5) stream segment and parameters impaired	
The Outfalls discharge to low flow streams-ditches that do not have data.	
Tier Determination	
Tier	Outfalls discharge to low flow streams; therefore Tier 1 designation is maintained. See Attachment 1.
Tier	
Management Plan	
Is the facility Referenced in a Management Plan?	No
Are limits contained in a Management Plan?	No

Review will be completed in 30 days of receipt of request.

Additional Comments:

KNB 7/28/2014

Until further guidance is provided by OWRM Permits, assessment of waters for NH_3 should be based upon OWRM Guidance No. 93-015 from Larry G. Lawson, dated June 22, 1993.

The above guidance specifies that the ambient NH_3 data should be compared to the NH_3 standard (calculated using 90th percentile of ambient data for pH and temperature of that segment) and by using the "STANDARDS.EXE Program" developed by OWRM Permits Modelling. (These environmental conditions are considered critical design conditions to protect water quality and to comply with WQS.) If the 97th percentile of the in-stream data is greater than either of the calculated NH_3 standards (chronic or acute), then OWRM considers the standard is being violated and the segment is WQL.

2.4.7 Wasteload Allocations Where The 7Q10 Is Zero Or *Minimal*

A discharge to a water course with a 7Q10 of zero or near zero would be required to have effluent limits that would comply with water quality standards, at a minimum. The discharge would have to be "self sustaining" so to comply with water quality standards. Therefore, the discharge would be WQL and the receiving water course with a 7Q10 of zero near zero would be considered a tier 1 segment.

Dry ditch = Tier 1

A discharge to a tier 1 water that empties into a tier 2 water would have to be evaluated for antidegradation at the point of confluence of the two water courses, if the discharge is in close enough proximity to impact the tier 2 water. In the above scenario, antidegradation requirements to protect tier 2 waters may apply to a discharge to a tier 1 water. Therefore, effluent limits may be more stringent than required by the numerical water quality standards.

If a discharge occurs to a dry ditch or tributary that empties into a free flowing stream and the distance from the discharge to the next confluence is too short to model (based upon the current modelling programs), then the discharge should be modelled as if it occurs directly to the free flowing stream.

2.4.8 Estuaries - Wasteload Allocations & TMDL Development

Similar to freshwater streams, water quality wasteload allocations (WQWLAs) and TMDLs in all tidal influenced waters will be expressed as a mass limitation for the conventional parameters (BOD_5, $cBOD_5$, TKN, and NH_3) and as a concentration for toxics.

Tidal freshwater segments and transition zone segments identified

Attachment I-1

Tier 1 Justification for Low Flow Streams

DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER DIVISION

OFFICE OF WATER RESOURCE MANAGEMENT

(SECOND DRAFT)

GUIDANCE MANUAL

FOR THE

VIRGINIA WATER QUALITY MANAGEMENT PLAN

March 4, 1994

Attachment I-2

Fred — Fred Holt OWRM 48

I believe we ought to obtain the needed data — Stop the discharge for stopping and continue monitoring for a year or two and we will evaluate data from Summer period

MEMORANDUM

VIRGINIA WATER CONTROL BOARD

TIDEWATER REGIONAL OFFICE

Pembroke Two - Suite 310 Virginia Beach, VA 23462

6-13-89

SUBJECT: Chesapeake Municipal Airport Permit Reissuance-VPDES No. VA0068209: Ambient Water Quality Data vs. Freeflow Modeling (probably yeilding stricter limits).

TO: Fred Holt, OWRM

FROM: R. E. Smithson, TRO

DATE: ~~April 06~~, 1989 June 07

COPIES: File

The referenced facility presently has 20/20 limits and a special condition for in-stream monitoring of the intermittent (dry weather) receiving ditch. Staff based limitations upon best professional judgement (20/20) because it was determined that the nature of the receiving stream (dry ditch) did not lend itself to mathematical modeling. The monitoring program was deemed appropriate in view of the fact that 10 miles downstream is a public water supply intake (Northwest River-Chesapeake Water Treatment Plant). The monitoring program was to give several years background data and continue for at least one year after plant start-up, but was inadvertently discontinued after six months of discharge when the facility switched lab contracts. That data is attached with discharge monitoring data highlighted. Critical data from summer months is not available.

enforcement

The treatment facility consists of an activated sludge package plant with chlorination and dechlorination. Flow, however, is much below design flow (~~.02~~ .01 MGD) which dictates that they batch treat the discharge. Average flow is presently about .003 MGD which flows to a field ditch several thousand feet long before entering a borrow pit or lake on the facility property. The borrow pit was created to obtain fill dirt for runway construction. The result is an impoundment approximately 50 ft. wide, 1/2 mile long, and 3 to 5 ft. deep. During dry weather that volume may be considerably less. The lake then discharges to an unnamed ditch which leaves the facility property and flows for about 1/2 mile before entering another ditch called 12 foot ditch (15 ft. wide, 2 ft. deep) that eventually enters Northwest River. A map is attached.

Staff requests guidance in reissuance of the referenced permit. Should limits remain 20/20 with an approved water quality monitoring program (giving us more meaningful data than previously submitted) or should limitations be dictated by a freeflow model which will probably result in 10/10 limits since the batch discharge is to an intermittently flowing, dry ditch with minimal dilution water. Water quality problems have not been observed or reported during the past permit period (issued 10/84). Please respond by ~~April 15th~~ June 21st, if possible.

49 C6

Chesapeake Municipal Airport

In-stream monitoring summary for D.O & NH3

		during discharge C.M.A.1 D.O.	C.M.A.2 D.O.	BOD_5 (CMA1)	NH_3 (CMA1)	
pH	Temp°C					
7.1	13	Jan '90 8.7	8.6	4	<.1	
7.0	9	Feb 10.3	11.2	<1	<.1	
6.8	10	Mar 10.0	10.4	<1	.2	—
5	21	April 12.0	9.9	14	.10	—
.2	17	May 8.9	9.0	4	<.10	—
7.4	24	June 8.7	8.4	7	<.05	
2	23	July 8.3	7.0	8	.17	
7.3	24	Aug 8.0	8.0	6	.20	.28
8.8	22	Sept 7.8	7.5	5	.05	
7.6	20	Oct 7.9	7.9	10	.06	10
7.9	16	Nov 6.8	7.0	11	1.4	
7.2	13	Dec 11.7	12.3	9	.42	
		Jan '91		avg 6.7	avg .25	

Conclusion: Permit Limitations of 20/20 are protecting state waters.

7/27/04 3:10:38 PM

Facility = Chesapeake Regional Airport
Chemical = Ammonia
Chronic averaging period = 30
WLAa = 7.3
WLAc = 1.7
Q.L. = 0.2
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 9
Variance = 29.16
C.V. = 0.6
97th percentile daily values = 21.9007
97th percentile 4 day average = 14.9741
97th percentile 30 day average= 10.8544
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 3.43003915880773
Average Weekly limit = 3.43003915880773
Average Monthly LImit = 3.43003915880773

The data are:

9

7/27/04 3:21:52 PM

Facility = Chesapeake Regional Airport
Chemical = Chlorine
Chronic averaging period = 4
WLAa = 19
WLAc = 11
Q.L. = 100
# samples/mo. = 30
# samples/wk. = 7

Summary of Statistics:

observations = 1
Expected Value = 300
Variance = 32400
C.V. = 0.6
97th percentile daily values = 730.025
97th percentile 4 day average = 499.137
97th percentile 30 day average= 361.815
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 16.0883226245855
Average Weekly limit = 9.8252545713861 9.8 ug/L X
Average Monthly LImit = 7.9737131838758 8.0 ug/L ✓

The data are:

300 ug/L BPJ

current weekly avg. limit of 9.6 is more strict - antibacksliding regulations preclude giving a less strict limit.

Water Quality Standards and Wasteload Allocations

Permittee:	Chesapeake Airport	Flows (MGD):	Design	0.01		90th % stream pH	7.84	MIX% for chronic WLA	100
Permit No.	VA0088209		7Q10	0	(chronic)	10th % stream pH	7	MIX% for acute WLA	100
Receiving Stream:	X Trib to 12' Ditch		1Q10	0	(acute)	90th % stream temp	23.8		
WQ Tier	1	(1 or 2)	30Q5	0	(human health - noncarcinogen)	mean effluent hardness	100		
Public Water Supply?	2	(1 = yes, 2 = no)	HM	0	(human health - carcinogen)	mean stream hardness	50	(note: 25 mg/l minimum)	

Parameter	Background	Water Quality Standard				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Acenapthene	0			1.2E+03	2.7E+03			na	2.7E+03			1.2E+03	2.7E+03			na	2.7E+03			na	2.7E+03
Aldrin [c]	0	3.0E+00	3.0E-01	1.3E-03	1.4E-03	3.0E+00	3.0E-01	na	1.4E-03	3.0E+00	3.0E-01	1.3E-03	1.4E-03	3.0E+00	3.0E-01	na	1.4E-03	3.0E+00	3.0E-01	na	1.4E-03
Ammonia-N (mg/l)	0	7.3E+00	1.7E+00			7.3E+00	1.7E+00			7.3E+00	1.7E+00			7.3E+00	1.7E+00			7.3E+00	1.7E+00		
Anthracene	0			9.6E+03	1.1E+05			na	1.1E+05			9.6E+03	1.1E+05			na	1.1E+05			na	1.1E+05
Antimony	0			1.4E+01	4.3E+03			na	4.3E+03			1.4E+01	4.3E+03			na	4.3E+03			na	4.3E+
Arsenic	0			5.0E+01				na				5.0E+01				na				na	
Arsenic III	0	3.6E+02	1.9E+02			3.6E+02	1.9E+02			3.6E+02	1.9E+02			3.6E+02	1.9E+02			3.6E+02	1.9E+02		
Barium	0			2.0E+03				na				2.0E+03				na				na	
Benzene [c]	0			1.2E+01	7.1E+02			na	7.1E+02			1.2E+01	7.1E+02			na	7.1E+02			na	7.1E+02
Benzo(a)anthracene [c]	0			4.4E-02	4.9E-01			na	4.9E-01			4.4E-02	4.9E-01			na	4.9E-01			na	4.9E-01
Benzo(b)fluoranthene [c]	0			4.4E-02	4.9E-01			na	4.9E-01			4.4E-02	4.9E-01			na	4.9E-01			na	4.9E-01
Benzo(k)fluoranthene [c]	0			4.4E-02	4.9E-01			na	4.9E-01			4.4E-02	4.9E-01			na	4.9E-01			na	4.9E-01
Benzo(a)pyrene [c]	0			4.4E-02	4.9E-01			na	4.9E-01			4.4E-02	4.9E-01			na	4.9E-01			na	4.9E-01
Bromoform [c]	0			4.4E+01	3.6E+03			na	3.6E+03			4.4E+01	3.6E+03			na	3.6E+03			na	3.6E+03
Butylbenzylphthalate	0			3.0E+03	5.2E+03			na	5.2E+03			3.0E+03	5.2E+03			na	5.2E+03				5.2E+03
Cadmium	0	3.9E+00	1.1E+00			3.9E+00	1.1E+00			3.9E+00	1.1E+00			3.9E+00	1.1E+00			3.9E+00	1.1E+00		
Carbon Tetrachloride [c]	0			2.5E+00	4.5E+01			na	4.5E+01			2.5E+00	4.5E+01			na	4.5E+01			na	4.5E+01
Chlordane [c]	0	2.4E+00	4.3E-03	5.8E-03	5.9E-03	2.4E+00	4.3E-03	na	5.9E-03	2.4E+00	4.3E-03	5.8E-03	5.9E-03	2.4E+00	4.3E-03	na	5.9E-03	2.4E+00	4.3E-03	na	5.9E-03
Chloride	0	8.6E+05	2.3E+05	2.5E+05		8.6E+05	2.3E+05	na		8.6E+05	2.3E+05	2.5E+05		8.6E+05	2.3E+05	na		8.6E+05	2.3E+05	na	
TRC	0	1.9E+01	1.1E+01			1.9E+01	1.1E+01			1.9E+01	1.1E+01			1.9E+01	1.1E+01			1.9E+01	1.1E+01		
Chlorodibromomethane	0			6.9E+02	5.7E+04			na	5.7E+04			6.9E+02	5.7E+04			na	5.7E+04			na	5.7E+04
Chloroform [c]	0			5.7E+01	4.7E+03			na	4.7E+03			5.7E+01	4.7E+03			na	4.7E+03			na	4.7E+
2-Chlorophenol	0			1.2E+02	4.0E+02			na	4.0E+02			1.2E+02	4.0E+02			na	4.0E+02			na	4.0E
Chlorpyrifos	0	8.3E-02	4.1E-02			8.3E-02	4.1E-02			8.3E-02	4.1E-02			8.3E-02	4.1E-02			8.3E-02	4.1E-02		
Chromium III	0	1.7E+03	2.1E+02			1.7E+03	2.1E+02			1.7E+03	2.1E+02			1.7E+03	2.1E+02			1.7E+03	2.1E+02		
Chromium VI	0	1.6E+01	1.1E+01			1.6E+01	1.1E+01			1.6E+01	1.1E+01			1.6E+01	1.1E+01			1.6E+01	1.1E+01		
Chrysene [c]	0			4.4E-02	4.9E-01			na	4.9E-01			4.4E-02	4.9E-01			na	4.9E-01			na	4.9E-01
Copper	0	1.8E+01	1.2E+01	1.3E+03		1.8E+01	1.2E+01	na		1.8E+01	1.2E+01	1.3E+03		1.8E+01	1.2E+01	na		1.8E+01	1.2E+01	na	
Cyanide	0	2.2E+01	5.2E+00	7.0E+02	2.2E+05	2.2E+01	5.2E+00	na	2.2E+05	2.2E+01	5.2E+00	7.0E+02	2.2E+05	2.2E+01	5.2E+00	na	2.2E+05	2.2E+01	5.2E+00	na	2.2E+05
DDD [c]	0			8.3E-03	8.4E-03			na	8.4E-03			8.3E-03	8.4E-03			na	8.4E-03			na	8.4E-03
DDE [c]	0			5.9E-03	5.9E-03			na	5.9E-03			5.9E-03	5.9E-03			na	5.9E-03			na	5.9E-03
DDT [c]	0	1.0E+00	1.0E-03	5.9E-03	5.9E-03	1.0E+00	1.0E-03	na	5.9E-03	1.0E+00	1.0E-03	5.9E-03	5.9E-03	1.0E+00	1.0E-03	na	5.9E-03	1.0E+00	1.0E-03	na	5.9E-03
Demeton	0		1.0E-01				1.0E-01				1.0E-01				1.0E-01				1.0E-01		

Parameter	Background	Water Quality Standard				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Dibenz(a,h)anthracene [C]	0			4.4E-02	4.9E-01			na	4.9E-01			4.4E-02	4.9E-01			na	4.9E-01			na	4.9E-01
Dibutylphthalate	0			2.7E+03	1.2E+04			na	1.2E+04			2.7E+03	1.2E+04			na	1.2E+04			na	1.2E+04
Dichloromethane [C]	0			4.7E+01	1.6E+04			na	1.6E+04			4.7E+01	1.6E+04			na	1.6E+04			na	1.6E+04
1,2-Dichlorobenzene	0			2.7E+03	1.7E+04			na	1.7E+04			2.7E+03	1.7E+04			na	1.7E+04			na	1.7E+04
1,3-Dichlorobenzene	0			4.0E+02	2.6E+03			na	2.6E+03			4.0E+02	2.6E+03			na	2.6E+03			na	2.6E+03
1,4-Dichlorobenzene	0			4.0E+02	2.6E+03			na	2.6E+03			4.0E+02	2.6E+03			na	2.6E+03			na	2.6E+03
Dichlorobromomethane [C]	0			5.6E+00	4.6E+02			na	4.6E+02			5.6E+00	4.6E+02			na	4.6E+02			na	4.6E+02
1,2-Dichloroethane [C]	0			3.8E+00	9.9E+02			na	9.9E+02			3.8E+00	9.9E+02			na	9.9E+02			na	9.9E+02
1,1-Dichloroethylene	0			3.1E+02	1.7E+04			na	1.7E+04			3.1E+02	1.7E+04			na	1.7E+04			na	1.7E+04
2,4-Dichlorophenol	0			9.3E+01	7.9E+02			na	7.9E+02			9.3E+01	7.9E+02			na	7.9E+02			na	7.9E+
(2,4-Dichlorophenoxy) acetic acid (2,4-D)	0			7.1E+01				na				7.1E+01				na				na	
Dieldrin [C]	0	2.5E+00	1.9E-03	1.4E-03	1.4E-03	2.5E+00	1.9E-03	na	1.4E-03	2.5E+00	1.9E-03	1.4E-03	1.4E-03	2.5E+00	1.9E-03	na	1.4E-03	2.5E+00	1.9E-03	na	1.4E-03
Diethylphthalate	0			2.3E+04	1.2E+05			na	1.2E+05			2.3E+04	1.2E+05			na	1.2E+05			na	1.2E+05
Di-2-ethylhexylphthalate [C]	0			1.8E+01	5.9E+01			na	5.9E+01			1.8E+01	5.9E+01			na	5.9E+01			na	5.9E+01
2,4-Dimethylphenol	0			5.4E+02	2.3E+03			na	2.3E+03			5.4E+02	2.3E+03			na	2.3E+03			na	2.3E+03
2,4-Dinitrotoluene [C]	0			1.1E+00	9.1E+01			na	9.1E+01			1.1E+00	9.1E+01			na	9.1E+01			na	9.1E+01
Dioxin (ppq)	0			1.2E-06	1.2E-06			na	1.2E-06			1.2E-06	1.2E-06			na	1.2E-06			na	1.2E-06
Endosulfan	0	2.2E-01	5.6E-02	1.1E+02	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02	2.2E-01	5.6E-02	1.1E+02	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02
Endrin	0	1.8E-01	2.3E-03	7.6E-01	8.1E-01	1.8E-01	2.3E-03	na	8.1E-01	1.8E-01	2.3E-03	7.6E-01	8.1E-01	1.8E-01	2.3E-03	na	8.1E-01	1.8E-01	2.3E-03	na	8.1E-01
Ethylbenzene	0			3.1E+03	2.9E+04			na	2.9E+04			3.1E+03	2.9E+04			na	2.9E+04			na	2.9E+04
Fluoranthene	0			3.0E+02	3.7E+02			na	3.7E+02			3.0E+02	3.7E+02			na	3.7E+02			na	3.7E+02
Fluorene	0			1.3E+03	1.4E+04			na	1.4E+04			1.3E+03	1.4E+04			na	1.4E+04			na	1.4E+04
Foaming Agents	0			5.0E+02				na				5.0E+02				na				na	
Guthion	0		1.0E-02				1.0E-02				1.0E-02				1.0E-02				1.0E-02		
Heptachlor [C]	0	5.2E-01	3.8E-03	2.1E-03	2.1E-03	5.2E-01	3.8E-03	na	2.1E-03	5.2E-01	3.8E-03	2.1E-03	2.1E-03	5.2E-01	3.8E-03	na	2.1E-03	5.2E-01	3.8E-03	na	2.1E-03
Hexachlorocyclohexane (Lindane)	0	2.0E+00	8.0E-02	7.0E+00	2.5E+01	2.0E+00	8.0E-02	na	2.5E+01	2.0E+00	8.0E-02	7.0E+00	2.5E+01	2.0E+00	8.0E-02	na	2.5E+01	2.0E+00	8.0E-02	na	2.5E+
Hydrogen Sulfide	0		2.0E+00				2.0E+00				2.0E+00				2.0E+00				2.0E+00		
Indeno(1,2,3-cd)pyrene C	0			4.4E-02	4.9E-01			na	4.9E-01			4.4E-02	4.9E-01			na	4.9E-01			na	4.9E-01
Iron	0			3.0E+02				na				3.0E+02				na				na	
Isophorone	0			6.9E+03	4.9E+05			na	4.9E+05			6.9E+03	4.9E+05			na	4.9E+05			na	4.9E+05
Kepone	0		0.0E+00				0.0E+00				0.0E+00				0.0E+00				0.0E+00		
Lead	0	1.2E+02	1.4E+01	1.5E+01		1.2E+02	1.4E+01	na		1.2E+02	1.4E+01	1.5E+01		1.2E+02	1.4E+01	na		1.2E+02	1.4E+01	na	
Malathion	0		1.0E-01				1.0E-01				1.0E-01				1.0E-01				1.0E-01		
Manganese	0			5.0E+01				na				5.0E+01				na				na	
Mercury	0	2.4E+00	1.2E-02	5.2E-02	5.3E-02	2.4E+00	1.2E-02	na	5.3E-02	2.4E+00	1.2E-02	5.2E-02	5.3E-02	2.4E+00	1.2E-02	na	5.3E-02	2.4E+00	1.2E-02	na	5.3E-02
Methoxychlor	0		3.0E-02	4.0E+01			3.0E-02	na			3.0E-02	4.0E+01			3.0E-02	na			3.0E-02	na	
Mirex	0		0.0E+00				0.0E+00				0.0E+00				0.0E+00				0.0E+00		
Monochlorobenzene	0			6.8E+02	2.1E+04			na	2.1E+04			6.8E+02	2.1E+04			na	2.1E+04			na	2.1E+04

Parameter (ug/l unless noted)	Background Conc.	Water Quality Standard				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Nickel	0	1.8E+02	2.0E+01	6.1E+02	4.6E+03	1.8E+02	2.0E+01	na	4.6E+03	1.8E+02	2.0E+01	6.1E+02	4.6E+03	1.8E+02	2.0E+01	na	4.6E+03	1.8E+02	2.0E+01	na	4.6E+03
Nitrate (as N)	0			1.0E+04				na				1.0E+04				na				na	
Nitrobenzene	0			1.7E+01	1.9E+03			na	1.9E+03			1.7E+01	1.9E+03			na	1.9E+03			na	1.9E+03
Parathion	0	6.5E-02	1.3E-02			6.5E-02	1.3E-02			6.5E-02	1.3E-02			6.5E-02	1.3E-02			6.5E-02	1.3E-02		
PCB-1016 [c]	0		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	na	4.5E-04
PCB-1221 [c]	0		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	na	4.5E-04
PCB-1232 [c]	0		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	na	4.5E-04
PCB-1242 [c]	0		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	na	4.5E-04
PCB-1248 [c]	0		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	na	4.5E-04
PCB-1254 [c]	0		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	na	4.5E-04
PCB-1260 [c]	0		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	4.4E-04	4.5E-04		1.4E-02	na	4.5E-04		1.4E-02	na	4.5E-04
Pentachlorophenol [c]	0	9.1E+00	5.7E+00	2.8E+00	8.2E+01	9.1E+00	5.7E+00	na	8.2E+01	9.1E+00	5.7E+00	2.8E+00	8.2E+01	9.1E+00	5.7E+00	na	8.2E+01	9.1E+00	5.7E+00	na	8.2E+01
Phenol	0			2.1E+04	4.6E+06			na	4.6E+06			2.1E+04	4.6E+06			na	4.6E+06			na	4.6E+
Pyrene	0			9.6E+02	1.1E+04			na	1.1E+04			9.6E+02	1.1E+04			na	1.1E+04			na	1.1
Radionuclides (pCi/l except Beta/Photon)	0																				
Gross Alpha Activity	0			1.5E+01	1.5E+01			na	1.5E+01			1.5E+01	1.5E+01			na	1.5E+01			na	1.5E+01
Beta and Photon Activity	0			4.0E+00	4.0E+00			na	4.0E+00			4.0E+00	4.0E+00			na	4.0E+00			na	4.0E+00
Strontium-90	0			8.0E+00	8.0E+00			na	8.0E+00			8.0E+00	8.0E+00			na	8.0E+00			na	8.0E+00
Tritium	0			2.0E+04	2.0E+04			na	2.0E+04			2.0E+04	2.0E+04			na	2.0E+04			na	2.0E+04
Selenium	0	2.0E+01	5.0E+00	1.7E+02	1.1E+04	2.0E+01	5.0E+00	na	1.1E+04	2.0E+01	5.0E+00	1.7E+02	1.1E+04	2.0E+01	5.0E+00	na	1.1E+04	2.0E+01	5.0E+00	na	1.1E+04
Silver	0	4.1E+00				4.1E+00				4.1E+00				4.1E+00				4.1E+00			
Sulfate	0			2.5E+05				na				2.5E+05				na				na	
Tetrachloroethylene	0			3.2E+02	3.5E+03			na	3.5E+03			3.2E+02	3.5E+03			na	3.5E+03			na	3.5E+03
Toluene	0			6.8E+03	2.0E+05			na	2.0E+05			6.8E+03	2.0E+05			na	2.0E+05			na	2.0E+05
Total dissolved solids	0			5.0E+05				na				5.0E+05				na				na	
Toxaphene [c]	0	7.3E-01	2.0E-04	7.3E-03	7.3E-03	7.3E-01	2.0E-04	na	7.3E-03	7.3E-01	2.0E-04	7.3E-03	7.3E-03	7.3E-01	2.0E-04	na	7.3E-03	7.3E-01	2.0E-04	na	7.3E-03
1,2,4-Trichlorobenzene	0			2.6E+02	9.5E+02			na	9.5E+02			2.6E+02	9.5E+02			na	9.5E+02			na	9.5E+02
Trichloroethylene [c]	0			2.7E+01	8.1E+02			na	8.1E+02			2.7E+01	8.1E+02			na	8.1E+02			na	8.1E+02
2,4,6-Trichlorophenol [c]	0			2.1E+01	6.5E+01			na	6.5E+01			2.1E+01	6.5E+01			na	6.5E+01			na	6.5E+01
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0			5.0E+01				na				5.0E+01				na				na	
Tributyltin	0	4.6E-01	2.6E-02			4.6E-01	2.6E-02			4.6E-01	2.6E-02			4.6E-01	2.6E-02			4.6E-01	2.6E-02		
Vinyl Chloride	0			2.0E+01	5.3E+03			na	5.3E+03			2.0E+01	5.3E+03			na	5.3E+03			na	5.3E+03
Zinc	0	1.2E+02	1.1E+02	5.0E+03		1.2E+02	1.1E+02	na		1.2E+02	1.1E+02	5.0E+03		1.2E+02	1.1E+02	na		1.2E+02	1.1E+02	na	

[c] = carcinogenic

Regular WLA = [WQS((%MIX/100)(stream flow) + design flow) - (streamflow)(background conc.)]/design flow

Antideg. Baseline = (0.25(WQS - background conc.) + background conc.) for acute and chronic

= (0.1(WQS - background conc.) + background conc.) for human health

Antideg. WLA = [Baseline(stream flow + design flow) - (stream flow)(background conc.)]/design flow

= data entry cells

= protected cells

Metal	Target Value (SSTV)
Antimony	4.3E+03
Arsenic	na
Arsenic III	1.1E+02
Barium	na
Cadmium	6.8E-01
Chromium III	1.2E+02
Chromium VI	6.4E+00
Copper	7.1E+00
Iron	na
Lead	8.1E+00
Manganese	na
Mercury	7.2E-03
Nickel	1.2E+01
Selenium	3.0E+00
Silver	1.6E+00
Zinc	4.7E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

Freshwater Ammonia Criteria			
	unionized	total	NH3-N
Acute	0.31	8.88418	7.3027944
Chronic	0.07066	2.02488	1.6644546

	Regular WLA	Antideg. WLA
Eff. 7Q10	0	0
Eff. 1Q10	0	0
Acute hardness	100	100.0
Chronic Hardness	100	100.0

Ches Mun. Airport

C5

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,pH	Temp	
6.8	9	
7	10	
7.1	13	
7.2	13	
7.2	16	
7.2	17	
7.3	20	
7.4	21	
7.5	22	
7.6	23	
7.9	24	
8.8	24	
7.84	23.8	90%tile

ATTACHMENT 9

TABLE III(a) AND TABLE III(b) CHANGE SHEETS

TABLE III(a)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001	TP	None to 1/Month	None to maximum 0.095 kg/d	Requirement from Northwest River TMDL	08/04/14 RES
001	TP Monthly Load	None to 1/Month	Calculated kg/m	Requirement from Northwest River TMDL	08/04/14 RES
001	TP Year-to-date	None to 1/Month	Calculated kg/yr	Requirement from Northwest River TMDL	08/04/14 RES
001	TP Calendar Year	None to 1/Year	Monthly Average 34.52 kg/yr	Requirement from Northwest River TMDL	08/04/14 RES
003	N/A	Outfall deleted	Outfall deleted	No longer utilized -closed out-	08/04/14 RES

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
Special Condition	Add NEW B. Schedule of Compliance for total phosphorous; ADD D.1.b. TMDL Reopener and D.10 Nutrient Reporting Calculation	08/04/14 RES
EPA Checklist	No longer required for fact sheet	08/04/14 RES
Special condition 4: CTC, CTO and O & M Manual Requirements language updated	Updated in accordance with VPDES Permit Manual	08/04/14 RES
QL's were updated; TP and O&G QL's were added to DMR	Updated/added in accordance with VPDES Permit Manual and Guidance	08/04/14 RES

TABLE III(b)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

N/A

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 10

CHRONOLOGY SHEET

VPDES PERMIT PROGRAM

CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
5/06/14	06/05/14	06/05/14	07/05/14	07/11/14

APPLICATION TO VDH/DSS/VMRC: 07/11/14 VDH/DSS/VMRC COMMENTS RECEIVED: VDH 07/18/14

APPLICATION TO OWPS: NA OWPS COMMENTS RECEIVED: NA

APPLICATION ADMIN. COMPLETE:07/11/14 (revised applic) APPLICATION TECH. COMPLETE: 07/18/14 VDH comments

DATE FORWARDED TO ADMIN: NA

Date	DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)
05/16/14	App received
06/05/14	Additional 2F application info. requested
07/11/14	Additional info. received, went to State Agencies for comments
07/11/14	Sent to state agencies via e-mail and FTP site.
7/18/14	VDH comments received.
07/22/14	Application admin complete letter sent to permittee
07/24/14	Planning comments/TMDL status solicited
02/28/14	Planning comments received
07/28/14	DSS comments solicited via e-mail a 2nd time; will proceed without them if none received
08/04/14	DP/FS developed
08/11/14	TMDL comments received
08/8/14	Fact sheet and draft permit finalized based on TMDL info. received
08/08/14	DP and FS finalized and submitted for internal technical review
08/12/14	Received comments on DP & FS, made changes and returned to Technical Coordinator for final review before going to owner
8/19/14	DP/FS/PN to owner
8/25/14	DP/FS & Applic to EPA for TMDL

ATTACHMENT 11

CORRESPONDENCE

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director
Maria R. Nold
Regional Director

August 19, 2014

Mr. Charles Chris Schrantz. Airport Manager
Chesapeake Regional Airport
2800 Airport Drive
Chesapeake, Va. 23323

RE: VPDES Permit No. VA0068209 - Draft Permit, Fact Sheet and Public Notice for Permit Reissuance
Chesapeake Regional Airport Wastewater Treatment Plant, Chesapeake, VA

Dear Mr. Schrantz:

The State Water Control Board is considering issuing the referenced permit modification. Please review the enclosed public notice and draft permit package carefully.

Certain public notice procedures must be complied with before the actual permit can be approved. They are as follows:

1. The attached public notice must be published once a week for two consecutive weeks in a newspaper of general local circulation. **We have already received your signed authorization form which will allow us to mail the notice to the newspaper and allow the newspaper to bill you for the public notice.**
2. A minimum of 30 days will be allowed for public response following the date of the first public notice. If no public response is received, or the public response can be satisfactorily answered, then the permit will be processed. However, if there is significant public response, then we may hold a public hearing. You will be advised if this occurs.

If you have any questions or comments on the draft permit or public notice requirements, please contact me at (757) 518-2106.

Sincerely,

Robert E. Smithson, Jr.
Environmental Specialist Senior

Encl: Draft Permit and Fact Sheet
Public Notice
DEQ TRO ECM File

PUBLIC NOTICE OF AN ENVIRONMENTAL PERMIT

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated wastewater, , as well as storm water, from a regulated municipal activity into a water body in Chesapeake, Virginia

PUBLIC COMMENT PERIOD: 30 days from the first date of this public notice (**date to be inserted by newspaper**)

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit- Treated wastewater and storm water issued by DEQ, under the authority of the State Water Control Board.

APPLICANT NAME ADDRESS AND PERMIT NUMBER: Chesapeake Regional Airport, 2800 Airport Drive, Chesapeake, Va. 23323; Permit No. VA0068209

FACILITY NAME AND LOCATION: Chesapeake Regional Airport Wastewater Treatment Plant, 2800 Airport Drive, Chesapeake, VA 23323

PROJECT DESCRIPTION: The : Chesapeake Regional Airport has applied to the Department of Environmental Quality (DEQ) for the reissuance of a permit for a treated domestic waste water, as well as industrial related storm water discharges from a small airport. The applicant proposes to discharge at a rate of 0.01 million gallons per day (MGD) into a water body. The permit will limit the following pollutants to amounts that protect water quality: pH, biochemical oxygen demand, total suspended solids, dissolved oxygen, ammonia nitrogen, oil & grease, fecal coliform and total residual chlorine with a compliance schedule to meet total phosphorus loading limitations. Generated sludge will be pumped and hauled by a septic hauler to HRSD Nansemond facility in Suffolk,Va. A storm water pollution prevention plan is required for the facility.

The facility proposes to release the treated wastewater to an unnamed tributary to Twelve Foot Ditch to the Northwest River- Chowan and Dismal Swamp watershed. A watershed is the land area drained by a river and its incoming streams.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing hand-delivery, by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: Robert E. Smithson, DEQ Tidewater Regional Office, 5636 Southern Blvd. Va. Beach 23462. Tel: 757-518-2106; Fax: 757-518-2009. E-mail: robert.smithsonjr@deq.virginia.gov

The public may review the draft permit and application at the DEQ office named above by appointment or may request copies of the documents from the contact person listed above.

Smithson Jr., Robert (DEQ)

From: Chris Schantz [cschrantz@chesapeakeairport.com]
Sent: Tuesday, August 05, 2014 10:44 AM
To: Smithson Jr., Robert (DEQ)
Cc: Austin, Deanna (DEQ)
Subject: RE: Question Concerning Any Vehicle Maintenance Outside

MR. Smithson,

I include aircraft in the definition of vehicles. Aircraft are fueled exclusively outside. Aircraft are rinsed with water only- no detergents as posted-immediately outside of the maintenance hangar. There is no maintenance operations that occur outside the designated maintenance facilities. There are no other motor vehicles (i.e. cars, trucks, boats, etc.) maintained on the airfield.

Feel free to contact me if I can answer any more questions.

Thanks.

R,

Chris Schrantz

> **From:** Smithson Jr., Robert (DEQ) [mailto:Robert.SmithsonJr@deq.virginia.gov]
> **Sent:** Tuesday, August 5, 2014 10:07 AM
> **To:** Chris Schantz
> **Cc:** Austin, Deanna (DEQ)
> **Subject:** Question Concerning Any Vehicle Maintenance Outside
>
> Chris,
>
> We are working on your draft permit and have the following question: Are there any vehicle maintenance operations (including vehicle rehabilitation, mechanical repairs, painting, fueling, or lubrication), material handling facilities, equipment cleaning operations performed outside of a building?

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Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Monday, July 28, 2014 2:17 PM
To: Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ); Austin, Deanna (DEQ)
Subject: FW: Permit Application for Review-Permit #VA0067423 Tangier WWTP (shellfish waters) & Permit # VA0068209 Ches Regional Airport Discharges- 2ND REMINDER FOR COMMENTS

Keith,

Need your comments for the referenced 2 facility applications, as well as for Kuzzens-Mappsville N. (below) sent over a month ago. Thanks

---

From: Smithson Jr., Robert (DEQ)
Sent: Monday, July 14, 2014 2:36 PM
To: Skiles, Keith (VDH)
Cc: Austin, Deanna (DEQ)
Subject: FW: Permit Application for Review-Permit #VPA01082, Kuzzens-Mappsville N. Packing Plant, Mappsville VA

Need to know if DSS has comments or not on the referenced application sent last month. Thanks

---

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, June 11, 2014 4:23 PM
To: Horne, Daniel (VDH); Howell, Beth (MRC); Stagg, Ben (MRC); Skiles, Keith (VDH)
Cc: 'Charles Hall'; 'Morgan Evans'; 'Richard Davis'
Subject: Permit Application for Review-Permit #VPA01082, Kuzzens-Mappsville N. Packing Plant, Mappsville VA

Attached is a link to the FTP site to access a permit application for your review. Under the folder for the facility listed above on the FTP site, there is a letter for each agency and the permit application. Please pull the information (available for 30 days) that you need off the FTP site. If you have any questions, please contact me. Thanks

http://www.deq.virginia.gov/fileshare/wps/PERMIT/TRO/VDH,%20DSS,%20VMRC%20For%20Review/VPA01082%20Kuzzens-Mappsville%20N.%20Packing%20Plant/

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

July 22, 2014

Mr. Chris Schrantz, Airport Manager
Chesapeake Regional Airport
2800 Airport Drive
Chesapeake, VA 23323

RE: VPDES Permit Application for Chesapeake Regional Airport; Permit No. VA0068209
Chesapeake Regional Airport WWTP: Application Administratively Complete

Dear Mr. Schrantz:

Your revised application received July 11, 2014 has been reviewed and appears to be administratively complete. Other reviews of the application will be required by state agencies to ensure that public health and the environment will be protected.

The next steps involve assembling the information necessary to develop the permit limitations and then drafting the permit. Once the draft permit is prepared and the appropriate reviews are performed, I will transmit the draft permit and supporting documentation to you for review.

Thank you for submitting all the various parts necessary to complete the application. If you have any questions about our procedures or the status of your client's draft permit, please feel free to call me at (757) 518-2106.

Sincerely,

Robert E. Smithson
Environmental Specialist Senior

cc: DEQ ECM File
Steven T. Peterson, Talbert & Bright via e-mail

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COMMONWEALTH of VIRGINIA

Marissa J. Levine, MD, MPH, FAAFP
State Health Commissioner

John J. Aulbach II, PE
Director, Office of Drinking Water

DEPARTMENT OF HEALTH
OFFICE OF DRINKING WATER
Southeast Virginia Field Office

830 Southampton Avenue
Suite 2058
Norfolk, VA 23510
Phone (757) 683-2000
Fax (757) 683-2007

DATE: JUL 16 2014

FROM: DBH Mr. Daniel B. Horne, PE, Engineering Field Director

TO: Mr. Robert Smithson, Jr., Environmental Specialist Sr.
DEQ Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach, VA 23462

CITY/COUNTY: City of Chesapeake

APPLICANT: Chesapeake Airport Authority

PERMIT TYPE: VPDES

APPLICATION TYPE: Re-Issuance (Existing)

PROJECT: Chesapeake Regional Airport Wastewater Treatment Plant

SUBJECT: Review response for DEQ's permit application # VA0068209

Our office has reviewed the application for the Chesapeake Regional Airport wastewater treatment plant.

The nearest downstream raw water intake is located approximately 10 miles southeast from the discharge point/area. The name of the waterworks is Northwest River System (PWSID No. 3550051) and the intake coordinates are 36° 34' 08" N, 76° 11' 55" W.

There are no apparent impacts to waterworks sources as a result of this permit.

pc: VDH – Office of Drinking Water
Nancy M. Welch, MD, MHA, Director, Chesapeake Health Department
Mr. Chris Schrantz, Airport Manager, Chesapeake Regional Airport
Mr. David Jurgens, PE, Director, Department of Public Utilities, City of Chesapeake

\\Odwsevfo\district\DIST20B\Chesapeake\GENERAL\Chesapeake Regional Airport VPDES memo 7-2014.docx

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Friday, July 11, 2014 4:44 PM
To: Horne, Daniel (VDH); Stagg, Ben (MRC); Howell, Beth (MRC); Skiles, Keith (VDH)
Cc: 'Chris Schantz'
Subject: Permit Application for Review-Permit # VA0068209, Ches Regional Airport

Attached is a link to the FTP site to access a permit application for your review. Under the folder for the facility listed above on the FTP site, there is a letter for each agency and the permit application. Please pull the information (available for 30 days) that you need off the FTP site. If you have any questions, please contact me. Thanks

http://www.deq.virginia.gov/fileshare/wps/PERMIT/TRO/VDH,%20DSS,%20VMRC%20For%20Review/VA0068209%20Ches%20Regional%20Airport/

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Smithson Jr., Robert (DEQ)

From: Chris Schantz [cschrantz@chesapeakeairport.com]
Sent: Friday, July 11, 2014 12:05 PM
To: Smithson Jr., Robert (DEQ)
Cc: 'Earl Hollowell'; 'Mary Cover'; 'Steve Peterson'
Subject: RE: Airport VPDES Reissuance Application- Additional Information Needed
Attachments: 2213-1401 Form 2F Additional Information.pdf

Mr. Smithson,

Please find included with this email a pdf copy of the additional information you requested for Form 2F of the VPDES Permit Application. This document contains information regarding the contributing pollutant sources to each of the noted outfalls shown in our previously submitted outfall map. This document also notes that no de-icing materials are used in any of the areas that drain to these outfalls. The Chesapeake Regional Airport does not currently provide de-icing services nor do we store any type of de-icing chemicals on the airport.

I trust this information will suffice and will allow our permit renewal process to continue. Thank you for your assistance and please do not hesitate to let me know if you have any questions.

Regards,

Chris Schrantz
Airport Manager
Chesapeake Regional Airport
2800 Airport DR
Chesapeake, VA 23323

757-432-8110 (W)
757-432-8410 (F)

CHESAPEAKE REGIONAL AIRPORT
REISSUANCE OF VPDES PERMIT
VPDES PERMIT NO. VA0068209

APPLICATION FORM 2F – SUPPLEMENTAL INFORMATION

POTENTIAL POLLUTION SOURCES

Outfall 001

The area that drains to Outfall 001 has one primary source of pollution which is the airports current water treatment plant. No other developed area drains to this point.

No de-icing chemicals are used in this area.

Outfall 002

Outfall 002 is the primary outfall for the airport's southern developed terminal area. In this area are 10 t-hangar/corporate hangar buildings that store approximately 100 aircraft. There is also an asphalt apron that holds approximately 20 aircraft by means of rope tie-downs as well as the airport maintenance building. Potential pollutant sources from these facilities include leakage of oil/grease/fuel from parked aircraft, runoff from paved surfaces and minimal erosion from the existing storm water management facility.

No de-icing chemicals are used in this area.

Outfall 004 (non-industrial)

Normal runoff from grassed/forested areas is anticipated in this location. No de-icing chemicals are used in this area.

Outfall 005

Outfall 005 is the primary outfall for the main terminal area and the existing fuel farm. Drainage to this location also includes the existing aircraft tie-down ramp which holds approximately 36 aircraft. Potential pollutant sources from these areas include leakage of oil/grease/fuel from parked aircraft, fuel from the existing fuel farm and oil/grease from the existing oil/water separators.

No de-icing chemicals are used in this area.

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Tuesday, July 08, 2014 1:57 PM
To: 'Chris Schantz'
Cc: Austin, Deanna (DEQ)
Subject: RE: Airport VPDES Reissuance Application- Additional Information Needed

The number specific to the airport is driven by a Northwest River TMDL and a concentration of 2.5 mg/l. THE LIMIT IN YOUR PERMIT WILL NOT BE IN CONCENTRATION, HOWEVER, BUT AN ANNUAL LOAD (kg/yr) of 34.52. I'm glad to hear that the consultant is working on both the information request (below) and also upon this new nutrient loading limit that will come down the road (4 yr. schedule). **Now what I need is how much longer the consultant will need to complete your application. Normally we allow 2 weeks to a month and that much time has already elapsed.**

---

rom: Chris Schantz [mailto:cschrantz@chesapeakeairport.com]
Sent: Tuesday, July 08, 2014 1:21 PM
To: Smithson Jr., Robert (DEQ)
Subject: RE: Airport VPDES Reissuance Application- Additional Information Needed

Mr. Smithson,

I believe our consultants are in process to address the items you mention. I can verify that there is no de-icing on the field and will include that in the formal response. For the WWTP samples, the latest information I have is a value of "0.2" for phosphate concentration. What is the typically permitted concentration value for this pollutant?

Thanks.

R,

Chris Schrantz

From: Smithson Jr., Robert (DEQ) [mailto:Robert.SmithsonJr@deq.virginia.gov]
Sent: Tuesday, July 8, 2014 1:04 PM
To: cschrantz@chesapeakeairport.com
Subject: FW: Airport VPDES Reissuance Application- Additional Information Needed

Your application for reissuance is incomplete. We cannot move forward without your response to our correspondence from a month ago. Let me know if you are having difficulties and/or when we can expect that information. Thanks

---

From: Smithson Jr., Robert (DEQ)
Sent: Thursday, June 05, 2014 10:11 AM
To: 'cschrantz@chesapeakeairport.com'
Subject: Airport VPDES Reissuance Application- Additional Information Needed

Mr. Schrantz:

The application overall looks good. Just need some additional information to deem it complete. The 2F application does not address what contribution sources go to each outfall. Please list all contribution

pollutant streams that go to each outfall. Also we would like confirmation that de-icing practices are not performed at this facility.

As I mentioned in previous April 7, 2014 e-mail correspondence, this permit reissuance will contain a 4-yr schedule to meet phosphorous loadings (Northwest River watershed TMDL) which will most probably require a treatment plant upgrade. I mention this again so that you and the Board are not financially blindsided by this requirement.

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Thursday, June 05, 2014 10:11 AM
To: 'cschrantz@chesapeakeairport.com'
Subject: Airport VPDES Reissuance Application- Additional Information Needed

Mr. Schrantz:

The application overall looks good. Just need some additional information to deem it complete. The 2F application does not address what contribution sources go to each outfall. Please list all contribution pollutant streams that go to each outfall. Also we would like confirmation that de-icing practices are not performed at this facility.

As I mentioned in previous April 7, 2014 e-mail correspondence, this permit reissuance will contain a 4-yr schedule to meet phosphorous loadings (Northwest River watershed TMDL) which will most probably require a treatment plant upgrade. I mention this again so that you and the Board are not financially blindsided by this requirement.

CHESAPEAKE
AIRPORT AUTHORITY

April 30, 2014

Robert E. Smithson, Jr.
Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, Virginia 23462

RE: Authorized Signature
Charles C. Schrantz, Airport Manager
Reissuance of VPDES Permit No. VA0068209
Permit Application
Chesapeake Regional Airport
Chesapeake, Virginia

Dear Mr. Smithson:

Please be advised that Charles C. Schrantz, Airport Manager for the Chesapeake Airport Authority, is the duly appointed executive agent for the Authority and as such is authorized to sign any and all applications and forms associated to and necessary to reissue VPDES Permit No. VA00068209.

Sincerely,

Earl S. Hollowell Jr.

Earl Hollowell, Jr.
Chairman

2800 AIRPORT DRIVE • CHESAPEAKE, VIRGINIA 23323
TELEPHONE 757•432•8110 • FAX 757•432•8410 • EMAIL ~~jlove~~cschrantz@chesapeakeairport.com

called 3/19/14 about due date

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Gantt, Clyde (DEQ)

From: Gantt, Clyde (DEQ)
Sent: Thursday, December 19, 2013 9:38 AM
To: 'cschrantz@chesapeakeairport.com'
Subject: Outfalls
Attachments: Airport Map.pdf

Mr. Schrantz,
When the application for the new permit is submitted, it should show some changes to the outfalls. Please reference the attached map.

Outfall 001 will remain the wastewater treatment plant. The outfall location on the map should be the actual sample location.
Outfall 005 will remain the aircraft was. The placement on the map should be the actual sample location.
Outfall 002 will be for the "industrial area" stormwater. The location will be in the main drainage ditch, downstream or east of where the pipe marked "002" on the map enters the ditch.
Outfalls 003 and 004 should be noted on the map. However, they should listed as "non-industrial" outfalls.

Contact me if you have any questions.

Clyde Gantt
VPDES/VPA Inspector
757-518-2114

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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

November 18, 2013

Mr. Joseph E. Love, Airport Manager
Chesapeake Regional Airport Authority
2800 Airport Road, Suite 1
Chesapeake, VA 233231

Re: Re-issuance of VPDES Permit No: VA0068209
Chesapeake Regional Airport, Chesapeake, VA

Dear Mr. Love:

This letter is to remind you that your VPDES permit will expire on November 8, 2014 .

If you wish to continue discharging, you must reapply for the permit. The State Water Control Board's VPDES Permit Regulation requires that we receive a complete application at least 180 days before the existing permit expires. The deadline for submitting the application is ***May 12, 2014***. Early submissions are welcome and will better enable us to complete processing before permit expiration. You are required to submit the following forms: **Form 2A, Form 2F, the Permit Application Addendum, the Sewage Sludge Application, the VPDES Permit Annual Maintenance Fee Form, and the VPDES Public Notice Billing Authorization Information Form (enclosed)**. Forms 2A and the Sludge Application are under the heading "Application Forms and Information". The permit application addendum and VPDES Permit Annual Maintenance fee form are further down under the heading "miscellaneous forms/information". Please fill out all of these and submit them along with the enclosed public notice authorization form. These forms can be found at
http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/PollutionDischargeElimination/PermitsFees.aspx#ggps
http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/PollutionDischargeElimination/PermitsFees.aspx

If you have difficulty locating/downloading any forms, please contact me. If you would like to request a waiver from any of the sampling or testing requirements in the application forms, you must submit your application and a thorough justification for the request at least 240 days prior to the exiting permit's expiration date. These waiver requests must be approved by DEQ and the U.S. EPA at least 180 days before the existing permit expires. DEQ will review your waiver request and, if it is justified, forward it to EPA. Failure to submit the waiver request by the 240 day deadline may result in the waiver being denied.

Upon completing the applications and other forms, return the original and two copies to the Tidewater Regional Office at the above address. If you have the technology available however, we would prefer that the original signature application and a disk/CD or an e-mail with the application attached be submitted. This would eliminate the requirement of submitting two copies.

There is no application fee for a regularly scheduled reissuance of an individual permit; that fee has been replaced by an annual permit maintenance fee which is to be paid by October 1 of each year. No permit will be reissued unless all maintenance fee payments are up to date.

DEQ has launched an e-DMR program that allows you to submit the effluent data electronically. There are many benefits to both DEQ and the permittee when e-DMR is utilized for submissions.

1) Fewer revisions for data since the e-DMR program automatically flags omissions before the data is submitted;
2) Cost savings on postage, copying, and paper;
3) No concerns about using the most current DMR – e-DMR refreshes the required parameters automatically when changes are needed;
4) Submittals can be made on a timelier basis; and
5) Electronic signatures from multiple people are allowed and e-DMR can be accessed from multiple computer locations.

We ask that you apply for e-DMR participation now so that we will be able to complete the application process when your permit is effective. The following website provides details:
http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/ElectronicDMRsubmissions.aspx

Please call me at (757) 518-2106 if you have any questions.

Sincerely,

Robert E. Smithson, Jr.
Environmental Specialist Senior

Encl: Public Notice Authorization to Bill Form